

EDUCATION IN NEW INDIA

by Humayun Kabir

SCIENCE, DEMOCRACY AND ISLAM
POETRY, MONADS AND SOCIETY

MEN AND RIVERS

THE INDIAN HERITAGE

MAHATMA AND OTHER POEMS
OF KINGS AND CABBAGES

THREE STORIES

ETC

EDUCATION
IN
NEW INDIA

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To

MAULANA ABUL KALAM AZAD

who with Tagore and Gandhi

has helped to shape a national system of education for India

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PREFACE

IN conformity with her democratic ideals India has decided to expand her educational facilities so that all her citizens may enjoy equality of opportunity. Simultaneously, she has undertaken a vast reconstruction of her educational system to make it a more suitable instrument for her new needs and new aspirations. A brief—but it is hoped not too inadequate—account of the steps she has taken towards these ends will be found in the succeeding pages.

After a rapid survey of the situation as it existed on the eve of independence and the progress achieved since then, these studies are devoted mainly to a discussion of the experiments India has undertaken or is undertaking in various fields of education. At the elementary level she is evolving a pattern in Basic education which is full of exciting possibilities and is likely to interest educationists throughout the world. Similarly her essays in a new type of adult education may be of significance to other countries as well. In the field of technical education, on the other hand, she is in the main repeating what other countries have already achieved. In spite of an almost phenomenal expansion in technical education I have therefore included no separate study in this field.

My obligations in writing this book are too many to permit individual acknowledgement to all who have helped. I am indebted to my colleagues in the Ministry and the State Directorates of Education for both data and many valuable suggestions. I am also thankful to editors of journals and secretaries of organisations whose pressure forced me to place on record some of these thoughts. All opinions expressed in this book are, however, mine and I alone must take responsibility for them. In particular they do not in any way commit the Government of India or the University Grants Commission.

I have drawn extensively upon articles I have written from time to time on different aspects of Indian education for journals and other publications in India, Europe and the United States. In every case I have revised and in some cases largely rewritten them so that it would be true to say that not one essay included in this volume has been published before in its present form. Besides bringing them together may give to each a support and frame of reference which could never be secured by isolated publication. I shall consider my labour rewarded if these studies can give the reader—and more particularly the reader from other countries—some idea of the vigour, vitality and variety of India's educational effort.

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Chapter One

EDUCATION IN INDIA

A BIRD'S-EYE VIEW

OF the many tasks which faced India immediately after the attainment of independence, one of the most stupendous was the reconstruction and expansion of her system of education. Steps had to be taken to provide free elementary education for all children of school-going age and ensure that they were not denied facilities that their parents had lacked. An immense programme of education for illiterate adults had to be taken in hand simultaneously. Steps had also to be taken to reorganize secondary and higher education and promote rapid expansion of scientific and technical education necessary for the development of industry and agriculture. Nor could the task of enriching the cultural life of the nation be ignored. Thus involved increasing patronage by the State of the various forms of art. It was also necessary to revive relations with neighbouring countries in East and West and establish contacts where none had existed before. For almost two hundred years, India's cultural contacts had been confined almost solely to Great Britain. An independent India could not remain insular or isolated in a continually contracting world.

The Constitution of India lays down that universal, compulsory and free education must be provided for children up to the age of fourteen within ten years of its promulgation. When we remember that on the eve of independence, existing facilities did not extend to even 25 per cent. of them, this directive must be recognized as revolutionary in import. The accomplishment of an intrinsically difficult task was made more difficult by the series of events that have shaken India since the attainment of independence. Freedom was achieved at the cost of partition of the country which was unfortunately followed by the disruption of the life of millions. There was a movement of population on an unpre-

cedented scale. An exchange of some ten million people took place between only the two Punjabs. A major portion of the entire resources in men, money and material of India had to be diverted to the gigantic task of rehabilitation of millions of displaced people. Before this problem could be fully solved, world forces led to the devaluation of the Indian currency with attendant inflation and scarcity of goods. The first five years of freedom were also a period of great difficulty on account of the failure of the monsoon or the onset of floods in different parts of the country. Food had to be imported from abroad on a scale unknown in Indian history. With these inescapable demands upon the resources of the country, it is not surprising that educational development, while not inconsiderable, fell short of the people's expectation.

As against these political, economic and natural difficulties, there was one fact which helped, and will increasingly help the progress of education in the country. This was the integration of the former princely States into the Indian Union. The country has been unified in a way never experienced before. The co-existence of princely States and the former British Provinces had been a drawback not only politically and economically, but even more from the point of view of the cultural and educational progress of the country. With some honourable exceptions, these princely States were educationally, and therefore socially, backward, and retarded the progress of India as a whole. The process of merger followed by complete integration has now made them an integral part of India. The strength of a chain is measured by its weakest link. We can now ensure that once past deficiencies have been removed, all the links in the chain of Indian education will be of equal strength.

Another measure directed towards the same end is the provision of enlarged facilities for the backward sections of the community. The Constitution has declared that there shall be equality of status and opportunity for all citizens and laid on the State an obligation to promote with special care the interests of those who suffer from social, economic or educational handicaps. The extensive

programmes of social education which seek to remove the handicaps from which the illiterate adult is liable to suffer are part of this move towards democratization of opportunity. Special efforts have also been made to increase the facilities available to girls and women. The number of girl pupils on the role of various types of educational institutions was doubled, rising from 3.5 million in 1947-48 to over 7 million in 1954.

Scholarships have been used as another instrument for equalizing educational opportunity. Apart from a large number of scholarships granted on considerations of merit alone, special schemes have been introduced to help poorer or more backward sections of the community to take advantage of available educational facilities. At the school level, State Governments have offered free education and scholarships on an increasing scale to pupils of the Scheduled Castes, Scheduled Tribes and other backward classes. These groups, as the name indicates, constitute that section of the Indian people who for historic reasons have suffered most from lack of opportunity. At the collegiate level, the Government of India has sought to help by instituting a scheme of post-matriculation scholarships for them. Between 1947 and 1954, this scheme has expanded more than thirtyfold. As against 0.3 million rupees spent on such scholarships in 1947-48, the amount spent in 1953-54 was Rs. 6.2 million. In 1954-55, it is proposed to spend over ten millions for the benefit of students from these communities.

There has also been growing realization that all educational progress depends ultimately on the quality of teachers. Over the last fifty years or so, there was steady deterioration in their social and economic status. The nadir was reached during the years of the war and its immediate aftermath. A situation was created where the teaching profession was often the resort of those who had failed everywhere else. Educational leaders of the country realized that the future of a nation depends on the quality of the younger generations and thus quality depends on the quality of teachers, but before 1947, they were often powerless to do what was needed.

After 1947, things have started to change. Scales of salary have been improved, in some cases more than four- or five-fold, but they are still short of what is needed to attract the right type of men and women to the teaching profession. Some steps have also been taken to raise the morale and social status of teachers. Special receptions have been held for primary-school teachers in the *Rashtrapati Bhavan* which have been attended by the President, the Prime Minister and the Education Minister of India. Seminar-cum-Summer Camps have been held in beauty spots in the hills for selected headmasters of secondary schools. Conferences have been held on an all-India basis where professors of universities have met to discuss problems of reorganizing syllabuses and courses of studies. In a word, attempts are being made to associate teachers at all levels in the framing of the educational, and in some cases, the social policy of the community. It must however be confessed that very much more will have to be done before we can build up a cadre of really competent and devoted teachers.

Since 1921, education has been a provincial subject under the direct control of an elected Education Minister responsible to the State legislature. The Constitution of Free India has not deviated from that pattern. Education at all stages, with two important qualifications, still remains a State subject. These qualifications are in respect of university education and technical education. In view of the need for co-ordination of facilities and the maintenance of standards at the higher levels, the Constitution has placed on the Central Government the responsibility in these regards. The heavy expenses involved in scientific and technical education require that there should be avoidance of any duplication in these fields. The promotion of higher scientific and technical education is therefore also a central responsibility.

While education thus remains a State subject and the Central Government has neither any direct responsibility nor any legal or constitutional rights, the exigencies of the situation have compelled it to take an increasing interest in almost every aspect of education. It is education which shapes the mentality of the future generations and it is imperative to ensure national uniformity in

its aims objects and standards Three factors have helped the Central Government to extend its functions as an advisory and co-ordinating agency The financial resources of almost all the States are inadequate to support their educational programmes and they look to the Central Government for grants and subsidies for short—as well as long term projects The Central Government is also a repository of information from all the States and often functions as a clearing house for all of them The fact that the State Governments are controlled by the same political party which wields power at the Centre has also helped particularly in view of the dominating position in national life enjoyed by Pandit Nehru

Legally, however, the Central Government can only persuade and cannot compel If a State Government is prepared to do without central financial aid it can exercise its constitutional right to ignore its advice This has led to the development of certain special instruments to secure uniformity and ensure co-ordination. The most important of these is the Central Advisory Board of Education It is an advisory body as its name indicates but since in addition to a number of experts it also includes all State Education Ministers as members and has the Central Education Minister as its chairman its deliberations have an almost binding force on both the Central and the State Governments The fact that its recommendations are almost invariably unanimous—during the last seven years only one question was decided by vote—gives it still greater authority

The All India Council for Technical Education and the recently constituted University Grants Commission perform the same functions in the fields of technical and university education As already mentioned the Central Government has a legal and constitutional status in these two spheres In addition large grants and subsidies are disbursed by or on the advice of these two bodies They therefore exercise a more direct and specific influence and act as a strong cementing force in the educational structure of India

The factors working for uniformity in educational standards and policies received a powerful impetus with the establishment

of the Planning Commission by the Government of India. The appointment of the Commission was based on the recognition that a co-ordinated effort of the Central and State Governments was necessary if the standard of life of the people was to be raised and the directive principles of the Constitution realized. Since the Commission's role was to assess the material, capital and human resources of the country and formulate a plan for their most effective and balanced use, the Commission had to lay down the broad lines of policy in every field of national activity. The paucity of resources in comparison to needs demanded on the one hand a proper determination of priorities to ensure that the most effective use was made of available resources and the most urgent needs first met, and on the other, a proper co-ordination of programmes at all levels to avoid duplication and waste.

In the field of education, the Commission drew up an integrated programme to meet the requirements of a democratic state. It frankly recognized that the different stages of education were closely interrelated and there could be no advance in any one sector without related advance in all the others. It also recognized that the varying needs and resources of the different parts of the country and the differences in their general and educational development required some flexibility in the determination of priorities and targets. It was nevertheless necessary to determine priorities and lay down targets on broad lines if there was to be effective co-ordination of the national effort. The Five Year Plan is thus bound to become an increasing factor in ensuring uniformity in aims, objectives and standards of education throughout the country.

I

Let us now briefly indicate the progress that has been achieved in various fields of education since the attainment of independence. At the elementary level, barely 30 per cent. of the children in the age group six to eleven were in schools of one kind or another in 1947. Within five years, the percentage had risen to about 40 per cent. and there has been further rise since then. On 31 March 1948, the number of primary schools in all the major States which now

constitute Part A States of the Indian Union was about 140 000. On 31 March 1953 the number had increased to almost 180 000. The number of pupils in these States alone had increased by over 4.6 million. Though accurate figures for other States are not available—some of them did not have any organized system of education and still less any educational statistics before 1947—one can safely assume that the increase within their territories was proportionately much greater. In India as a whole, the number of elementary schools was over 220 000 and the number of pupils well over 19 million on 31 March 1953.

Not only has there thus been an enormous quantitative expansion but there has also been a remarkable effort at qualitative improvement. The old type of mainly literary and academic instruction at the elementary level is being gradually replaced by a system of national Basic education. The essential point in the conception of Basic education is that education should be integrated with life and built up round some socially useful activity like a craft. Instead of treating the different subjects in the school curriculum as distinct and isolated items, every attempt must be made to bring out their correlation and unity. The schools must also from the earliest childhood teach children to live as members of a co-operative community. The Government of India as well as the State Governments have accepted the principle of Basic education and a process of change-over to the system has begun. Programmes of training of teachers and the implementation of pilot projects have been taken in hand to facilitate further expansion. The number of Basic schools has also increased but the progress has not been as rapid as one would wish on account of dearth of adequately trained teachers.

In 1947 of the 561 000 teachers in primary schools only 58.2 per cent were trained. The enrolment in the training schools was less than 40 000 per year. By 1953 the enrolment had increased to over 70 000 a year. A large number of existing training schools have been converted to Basic training schools. In many cases the period of training has been shortened with the addition of in-service courses at regular intervals. Nevertheless it has to be

admitted that the number of institutions and trainees is still inadequate to the country's needs.

Wholesale conversion of existing primary schools into Basic schools must from the nature of the case be a long-term process. Interim measures have therefore been taken to improve the content of primary education in various ways. They have all been devised with a view to making later conversion into Basic education easier. Thus steps have been taken to enrich the curriculum by introducing crafts and other forms of creative activity.

The increase in the expenditure on elementary education is also an indication of the country's anxiety to fulfil the objectives of the Constitution as early as possible. On 31 March 1948, the total direct expenditure on primary schools in Part A States was Rs. 187 million a year. On the corresponding date in 1953, it was Rs. 349 million. For the whole of India on that date, the expenditure on primary schools was Rs. 437 million.

This picture of the growth of elementary education in India would be neither clear nor complete if two other important factors were not mentioned. With the advent of freedom, people are today eager, as they have never been before, to exercise what they know to be a right and to secure proper education for their children. All over the country, they have freely contributed land, money and physical labour to the building of village schools. In one district alone, 600 school houses were built by the local people themselves. This eagerness for education has been even more marked in areas where facilities for education were meagre or non-existent before 1947. In the Tribal Areas of the North-East Frontier Agency, a territory covering almost 30,000 miles, not a single school existed before 1947. In 1953, the number of schools in the Agency was nearly 1,900.

II

Education for children must be the first call on the nation's resources. Children however take time to grow up and in the meantime events will not wait. In 1937, the introduction of Provincial Autonomy and the spread of the franchise in rural areas gave a

great and direct impetus to the education of the adult. This campaign for adult education led to a considerable increase in literacy, but even then taking the population above 5 literacy in 1941 stood at only 14.6 per cent. By 1951 the figure had risen to 18.3 per cent. These figures do not however tell the whole story. The great spurt of activity in adult education that started in 1937 was interrupted by the outbreak of World War II though its full impact was felt in India only after 1941. During the war years there was instead of any increase a large-scale reduction in educational facilities. Many schools closed down and adult education activities were almost at a standstill. It was not till 1946 that programmes of adult education were again initiated. The years 1946 and 1947 were however marked by tension and uncertainty which hindered all constructive work and finally led to the partition of the country. It is therefore almost certain that on the eve of independence the literacy figures were lower than they were in 1941. The increase of literacy from 14.6 to 18.3 per cent may therefore be regarded as an entirely post-independence achievement.

Apart from a vast expansion in facilities—the enrolment has increased more than five-fold—there has also been a noteworthy qualitative improvement in the programmes of adult education in India. Before independence, programmes of adult education aimed only at teaching to read and write but experience showed that after the first flush of enthusiasm adults exhibited a flagging interest in mere literacy. The new programmes had to devise methods which would sustain their interest and at the same time make the education significant for the tasks they have to face.

The new concept of adult education formulated by the Government of India seeks to meet both these demands. It recognizes the importance of literacy but also recognizes that the diverse interests of the adult must be sustained if an educational programme is to succeed. A new five-pointed programme of social education has therefore been formulated which seeks to place appropriate emphasis on (a) literacy (b) knowledge of rules of health and hygiene (c) training for improvement of economic conditions

(d) civic education and training in citizenship and (e) the recreational aspects of education.

In order to bring out the distinction from the older programmes of mere literacy and also to emphasize that education for the adult must be social in its content, the name *Social Education* has been given to these new programmes.

Experience of the adult education drive of 1937-39 had also shown that literacy cannot be sustained in the absence of an adequate supply of literature suited to the needs and tastes of the neo-literates. Early in 1950 it was decided to publish a series of pamphlets on various topics which interest the common man. A hundred and sixty pamphlets have already been published in Hindi with an open permission to translate them into any other Indian language. Recently another scheme has been instituted by which any approved book suited for neo-literate adults in any Indian language is assured a minimum sale. In addition, a selected number of these books will be awarded prizes every year. The Central Government has also had prepared the first volume of a five-volume *People's Encyclopaedia* in simple Hindi. A number of literary workshops have also been organized to give special training in the production of literature for neo-literates. Many of the State Governments have also taken commendable action in the production of such literature in the various Indian languages.

Indian effort for the spread of literacy has not however been confined to her own problems. Conscious of the role of education in raising the standard of life in all underdeveloped countries, India organized the first U.N.E.S.C.O. seminar in Asia on *Rural Adult Education for Community Action*. She has also provided facilities for an international centre for training workers in Fundamental Education. Steps have also been taken to develop the use of audio-visual aids in social education. Special training courses for workers have been organized from time to time to meet this need.

Some measure of the progress in social education may be obtained from the fact that more than ten million illiterate adults have been made literate between 1947 and 1954. It is gratifying to note that women have responded enthusiastically to

these programmes and account for a fair proportion of the neo-literates

III

Reconstruction of elementary or expansion of adult education is however impossible without a comparable expansion and reconstruction of secondary education. Teachers for both are provided mainly by the secondary schools. It is again secondary schools which prepare students who wish to go up for higher studies. Secondary education has thus a vital role to play in the programme of education of the community. It is however common knowledge that secondary education has till now been the weakest link in the Indian educational chain. Quantitatively, it provides facilities for barely 10 per cent of the young persons in the age group of 11-17. This number is patently inadequate to satisfy the needs of a growing democracy. Besides, even this 10 per cent are selected not on the basis of ability, but on that of the capacity of the family to pay the necessary schooling fees. Qualitatively, it has no specific character of its own. Nor can it be regarded as a definite stage marking the end of formal education of a specified standard. Treated as merely preparatory to higher education, almost all who pursue it drift into the stream of university education. Again, it is far too literary and does not cater for the wide variety of needs of pupils with different aptitudes.

The reconstruction of secondary education both quantitatively and qualitatively is therefore an urgent necessity. On the one hand, facilities have to be extended to provide schooling to far larger numbers that went to school before 1947. On the other hand, it is necessary to provide for a wider variety of subjects for children with different aptitudes. It is also necessary to develop new types of vocational schools to meet the different needs of rural and urban areas.

The quantitative expansion in the field of secondary education since 1947 has at times been described, not without justification, as staggering. In 1948 the total number of secondary schools including middle and high schools was a little over 12,500 in what

are now the A States. Five years later in 1953, their number had increased to 18,500. The progress is even more striking if we confine our attention to high and higher secondary schools. From less than 4,000 in 1948, the number of such schools rose to almost 10,000 in 1954.

The figures of enrolment are equally arresting. In 1948 the number of students in middle schools was a little over a million in the A States. In 1953, the number had risen to 1.5 million. For high and higher secondary schools, the number rose from 1.8 million in 1948 to almost 3 million in 1953. The total number of pupils in all types of secondary schools was over 6 million in 1954. The number of pupils who completed the secondary course was more than doubled between 1948 and 1953.

The rise in the expenditure on secondary education is also revealing. In 1948, direct expenditure on secondary education in the A States was Rs.134.8 million. In 1953, the figure had risen to Rs.286.8 million. For India as a whole, the figure for 1953 was Rs.368.5 million.

The period has also seen persistent efforts for the qualitative improvement of secondary education. Many of the States appointed their own committees to make recommendations for the purpose. It was however felt that an all-India survey of the problem was needed if secondary education was to serve effectively the needs of free India. Accordingly, a Commission headed by Dr. Lakshmanaswami Mudaliar was appointed in 1952 to review the problems of secondary education for India as a whole and submitted its report in 1953.

Only a few of the major recommendations of the Commission can be indicated here. It has recommended the addition of one extra year to the secondary school course in order to round off secondary education and mark it as a complete stage. This is expected to raise the standard of attainment and prepare the pupils for entry into various vocations. Another important recommendation is for the reconstruction of the syllabus to provide for a greater diversity of courses without increasing the burden on the pupils. This is sought to be done by organizing the syllabus round

a number of carefully selected core subjects. A third important recommendation is for the establishment of a large number of multi-purpose schools. Large-scale reforms in the system of examination have also been recommended.

Some of the recommendations of the Commission have been anticipated by the States during the last seven years. Others are being actively pursued. In many secondary schools, the curriculum has been improved by the introduction of subjects like civics, music, crafts and agriculture. New types of high schools devoted to agricultural, technical and vocational education have also been established. Still more significant is the evolution of a new type of secondary school in the shape of the post-Basic school.

Mention must also be made of the effort to improve the quality of teachers in secondary schools. Facilities for training were greatly expanded and new courses of in-service training introduced. Within four months of its accession to power, the national Government established the Central Institute of Education at Delhi to give a new orientation to the training of teachers and initiate programmes of educational research. The Institute is seeking to devise a type of Basic education suited to urban areas, developing cheap and functional furniture for use in schools and preparing new and economical types of audio-visual media. In the short space of seven years, the progress it has attained has attracted the attention of discerning educationists both inside and outside India.

IV

In the field of university education, the primary need of the country is consolidation and improvement of existing facilities. There has however been a considerable quantitative expansion. Before 1947, there were 21 universities in undivided India. In spite of the partition, the number has risen to 31 in the Indian Union alone. The number of students receiving higher education rose from less than 225,000 in 1948 to over 465,000 in 1953. In 1948, the number of graduates from part A States of the Indian Union was 27,000. In 1953, it was 52,000.

Expenditure on universities and other institutions of higher education (exclusive of technical education) rose from Rs.76.2 million in 1948 to Rs.164 million in 1953 in the A States. The figure for India as a whole was Rs.211.6 million in 1953.

The main problem in the field of university education is however one of quality. Even before 1947 there were complaints of deteriorating standards. Overcrowding and preoccupation with merely theoretical subjects attracted the criticism of educationists and public men. It was also pointed out that universities catered only for the towns and had nothing to offer for rural needs. After 1947 it was felt that the whole question of university education must be examined afresh. The Indian University Education Commission was accordingly appointed in 1948 under the Chairmanship of Professor Sarvepalli Radhakrishnan and submitted its Report in 1949.

The Commission has maintained that universities must provide leadership not only in politics and administration, but also in the various professions, industry and commerce. They must also meet the increasing demand for every type of higher education, literary and scientific, technical and professional. Recognizing the importance of a broad liberal education, the Commission has nevertheless stressed the need to develop the faculties of science, technology and agriculture in Indian universities. For a country like India, expansion of agricultural education is, in the Commission's opinion, one of the highest priorities. It has suggested that agricultural colleges should, as far as possible, be located in rural areas. This will enable students to participate directly in rural life and acquire a first-hand experience of the rural environment. It will also meet one of the main criticisms of the existing system of education that it tends to overlook the needs of rural areas.

Before the attainment of freedom English was the medium of instruction in all Indian universities. All leading educationists however held that this imposed an undue burden on a majority of students and English must in course of time give place to an Indian language. The demand for the replacement of English became much stronger after 1947. As a corollary to this demand, many

regional universities were established and it can be said that by 1952 no major linguistic area of India was without its own university. At the same time educationists have insisted, and the country has generally agreed, that the pace of change must be governed by educational needs and not extraneous considerations. The Commission's recommendations in this regard have helped to steady opinion and maintain educational standards.

One of the most important of the Commission's recommendations was for the establishment of a University Grants Commission on the lines of the University Grants Committee in Great Britain. In pursuance of this recommendation, the Central Government at first established a University Grants Committee. It has been pointed out earlier that the maintenance of standards and co-ordination of facilities at the level of university education is a Central responsibility. It was generally agreed that this responsibility could be most effectively discharged by strengthening the University Grants Committee. The Committee has recently been replaced by the University Grants Commission with enlarged powers and functions. Large funds have been placed at its disposal for distribution among Indian universities. It is expected that the Commission, by exercising a healthy if indirect influence will bring about a better co-ordination among universities and create conditions for effective and economical expansion of higher education. Progress in research at universities has been greatly stimulated by the policy pursued since the attainment of independence. The University Grants Commission is expected to sustain and strengthen this progress.

According to another important recommendation of the Commission, research scholarships for science and the humanities have been instituted to enable young men and women of promise to carry on higher study and research. Facilities for advanced work have been greatly expanded in universities and a chain of national laboratories. The establishment of these laboratories is a post-independence achievement of enormous significance. Strictly speaking, they are not educational institutions but, as important centres of higher learning and research, they can make an immense

contribution to the improvement of standards in scientific education.

V

World War II had revealed glaring deficiencies in the Indian national economy. Some industrial and technological progress was no doubt achieved under the stress of war, but this was more in the nature of an improvisation to meet immediate needs than a well-planned programme designed to sustain all-round national development. With the conclusion of hostilities, large-scale industrialization was taken in hand but this could not be carried out without a thorough overhaul of the structure of engineering and technical education in the country. It was to cope with this situation that the All-India Council for Technical Education was set up to suggest measures for the improvement of standards and the expansion of facilities for technical education at all levels.

The achievement of independence gave added urgency to this task. It was increasingly recognized that all material progress depends upon technical and scientific manpower. The existing facilities in engineering and technical education were on the other hand far short of the requirements both qualitatively and quantitatively. In 1947-48, India produced only about 900 graduates in engineering and 300 in technology. Facilities for advanced training and research at the post-graduate level were meagre in engineering and almost unknown in technology. Technical education was therefore the field where the greatest advance had to be made in the shortest time.

Just as the need was the greatest, the improvement has also been the most significant in this field. The number of graduates in both engineering and technology has increased more than threefold. Selected institutions all over the country have been given large grants to improve their buildings, laboratories and equipment. Steps have been taken to strengthen their teaching staff. There has also been a large increase in the number of scholarships to poor students of promise. One of the weaknesses of technical education in the past was the lack of proper practical training facilities. In

co-operation with industry a scheme of industrial training scholarships has been introduced to overcome this shortcoming

One of the most important events in Indian technical education was the establishment in 1951 of the Indian Institute of Technology at Kharagpur near Calcutta. Intended to develop primarily as a post-graduate and research institution it will offer facilities for technological education and research at the highest level. It will ultimately provide facilities in all important fields of engineering and technology. Special mention may however be made of the work already begun in the fields of combustion engineering, production technology, naval architecture, mechanical handling and industrial engineering.

The Indian Institute of Science, Bangalore, has had old facilities strengthened and new facilities added. Even before 1947 the Institute had established itself as a well known centre of research in the pure and fundamental sciences. With the formulation and near-completion of plans for the technological development of the Institute between 1947 and 1952 it has now become a post graduate and research institution of the highest quality in technology as well.

A few figures may be quoted to give some idea of the progress achieved. Enrolment at the school level went up from about 200 000 in 1947 to over 1.15 million by 1953, while expenditure rose from about 22.5 million to 65.5 million rupees. The expansion was equally marked at the collegiate level. Here the enrolment rose from less than 46 000 in 1947 to about 115 000 in 1953. Expenditure rose from 20 million in 1947 to almost 60 million in 1953.

VI

This rough and overall picture of the educational programme of the Indian Republic would however remain incomplete if some reference is not made to the steps taken for developing the cultural life of the people. Education not only in India but else where in the modern world tends to emphasize the intellect at the cost of imagination and feelings. Serious problems arise from

this neglect of some of the vital elements in man's nature and educationists in Europe and America are today seeking to devise means to correct the resulting unbalance.

India has escaped some of these problems because of her long tradition of people's culture which has fostered the harmonious development of intellect, will and feelings. The colourful rituals have given scope to the play of imagination. The stories of the Epics have provided moral education to the people. Oral discourses on philosophy and religion have helped to train the intellect. Customs and folk lore, proverbs and fables, mythology and scripture have been passed from generation to generation through folk songs, folk drama and folk art at various levels. The tradition of artistry is ingrained even in illiterate persons as may be seen in the *alpanas* and decorations done by village women and in the dramas, dances and *kathaks* performed by village men.

In order to maintain this tradition and encourage the development of art, the Government of India has instituted Presidential Awards to outstanding musicians and scholarships, monetary assistance and/or recognition to artists of merit. Exhibitions of the visual arts and performances by troupes of dancers have been organized within the country and sent abroad. Similar troupes and exhibitions from abroad have also been encouraged to visit India.

National Academies have been set up to stimulate and promote the culture of the country by encouraging the study and development of literature, architecture, sculpture, painting, music, dramatic art and dancing. The *Sangeet Natak Akademi* was inaugurated in January 1953 to preserve and enrich our heritage in dance, drama and music. The *Sahitya Akademi* was inaugurated in March 1954 to perform the same services in the field of letters. The *Lalit Kala Akademi*, founded in August 1954, will encourage and promote study and research in the fields of painting, sculpture, architecture and applied arts.

A notable achievement of the seven years under review was the publication under the sponsorship of the Government of India of a *History of Philosophy: Eastern and Western*.^{*} This is in many respects

^{*}George Allen & Unwin, London.

a unique work. In its broad sweep it surveys the philosophical development of mankind as a common heritage and makes a comparative study of the philosophies of East and West. The initiative in this project came from Maulana Abul Kalam Azad, the first Education Minister of free India. He pleaded for such a history of Eastern and Western philosophy by pointing out that most of the current histories written by Europeans either altogether ignore or make merely a passing reference to the contribution of India, while most books by Indians deal exclusively with Indian philosophy. The result is that people fail to realize the continuity in the development of human thought. Nor do many people outside India have any idea of the value of the Indian contribution to the evolution of modern philosophy. A true evaluation of India's place in the world of philosophy is necessary, not only from the point of view of knowledge but also in order to acquire a proper appreciation of the meaning of Indian civilization and culture in the context of the modern world. The book appeared in 1952 and has been exceedingly well received.

An evidence of the growing interest in India of contact with foreign countries and of the interest of such countries in India is seen in the large number of scholarships, fellowships or travel grants that have been instituted in the seven years of freedom. The Government of India awards 100 scholarships a year to nationals of 34 countries under a scheme of Cultural Scholarships. Under a separate scheme, reciprocal scholarships are offered to a number of countries which have offered scholarships to Indian nationals. A special scheme of scholarships has also recently been instituted to encourage Indian nationals to study foreign languages like Arabic, Chinese, French, German, Italian, Japanese, Persian, Russian, Spanish and Turkish. An autonomous organization entitled the Indian Council of Cultural Relations was established in 1950 to revive and strengthen cultural relations between India and other countries by promoting wider knowledge and appreciation of their languages, literatures and art and establishing closer contacts between universities and cultural institutions. One of the founder members of U.N.E.S.C.O. India established

an interim National Commission in 1949 and a permanent Commission in 1952. Various important conferences have been held under its auspices. An *International Seminar on Rural Adult Education for Community Action* held in 1949 was the first attempt to survey the needs and frame programmes of action for the eradication of illiteracy and ignorance throughout Asia. In 1951 a *Round Table Conference on the Concept of Man and the Philosophy of Education in East and West* was held. In 1953 an International Seminar was organized to discuss the application of Gandhian techniques to the solution of tensions within and among nations. At the first Conference of the permanent Indian National Commission held in January 1954, fraternal delegates were invited from Asian and African countries and important recommendations made on the possible utilization of atomic energy, the contribution of Gandhian ideas to the solution of international tensions, the need for wider dissemination of Asian and African culture and the peaceful co-existence of different ideas and systems.

VII

Seven years of freedom have thus been seven years of endeavour and expansion in Indian education. Achievement of independence set before the people new objectives and imposed on them new responsibilities. It will be clear from the brief account given above that many of the existing shortcomings have been overcome and the foundations laid for a national system of education for resurgent India.

The overall expenditure on education during these years highlights both the achievement and the magnitude of what still remains to be done. In 1946-47, the total Government expenditure on education was about Rs.205 million. The Central budget was considerably less than Rs.20 million. The figures for three recent years 1951-52, 1952-53 and 1953-54 show that the total budget provision for education by the Central and the State Governments were Rs.741, Rs.826 and Rs.934 million respectively. The total national expenditure on education from all sources, governmental

and otherwise also shows a sharp rise. For the year 1946-47, it stood at Rs 451 million. By 1952-53, it had risen to Rs 1,350 million. The estimated expenditure for 1953-54 was almost Rs 1,500 million. Governmental expenditure on education has thus increased more than fourfold but expenditure from other sources has not kept pace with this increase.

There is however no ground for complacency. The achievement is still far short of the aspirations and perhaps even short of the capacity of the Indian people. Judged against the record of other countries in comparable circumstances and within a comparable period, India has no cause for shame but she cannot forget that she must multiply her present expenditure almost threefold in order to provide Rs 4 000 million a year needed to finance a truly national system of education worthy of her traditions and her hopes.

September 1954

THEORY AND PRACTICE OF BASIC EDUCATION

A NATIONAL system of education is always the reflection of a national system of ideals. One can in fact go further and say that education is shaped by and in turn shapes the life-purposes of individuals and groups. This applies not only to human beings but also to what we tend to regard as the lower orders of creation. Thus the young of animals prepare themselves for future life by imitating the actions of the adults. In the case of man such imitation is a conscious process of training for fulfilling the responsibilities of adult life. It is this consciousness of purpose that distinguishes human systems of education from the unreflective acquisition of habits and skills in animal life.

Changes in the environment require changes in the response of the individual if the species is to survive. Wherever members of a species fail to modify their reactions in response to variations in the stimuli that species is set on the way to extinction. The story of evolution is a record of the continuous effort at improving adaptation to the environment. Human beings have however reached a stage where they are no longer content merely to respond to the environment: they now seek to adapt the environment to their own needs. Since conscious purposes govern a continually expanding area of human activity, any change in social objectives demands and is invariably accompanied by a change in the system of education.

Like other social reformers, Mahatma Gandhi knew that without reform in education he could not attain his social objectives. The quality of a society depends on the quality of its members. Improvement of the individual through education is thus the only means to achieve an improved type of society. The recognition that the citizen of the future can be best moulded during the first and formative years of his life led Gandhi to formulate his con-

ception of Basic education as the means to achieve a co-operative commonwealth of men. In his own words, 'The principal idea is to impart the whole education of the body and the mind and the soul through the handicraft that is taught to the children. You have to draw out all that is in the child through teaching all the processes of the handicraft and all your lessons in history, geography and arithmetic will be related to the craft.'

The human individual is essentially a social being and must live in a community. Basic education treats the child as a member of a co-operative group. The school is an epitome of society, and in fact each class is a miniature society. The recognition of the school as a community thus offers the most suitable atmosphere for training in citizenship. The children are taught to feel as members of one community, and as such, responsible to and for one another. Duties to others are as important as one's own rights. Basic education therefore seeks to correct the modern tendency to loosen family and social ties in the name of individual liberty. Over-emphasis on rights leads to a distortion of the human personality. The effect of such distortion is seen in maladjusted individuals and divided societies.

Gandhi felt strongly that education must reintegrate the individual and develop him as a member of a living society. As a unit of a co-operative group, all activities of the child have a social content. Basic education is based on recognition of this fact and aims to make such recognition a part of the mental make-up of the growing children. Not only are all school activities organized in groups but they are such as have an immediate social utility. The aim is to inculcate in the child a spirit of co-operation and a sense of responsibility from the very beginning.

All educational psychologists agree that the child can learn more quickly through active participation in a process than by passive reception of instruction given by a teacher. A child loves to *do* things. By nature he is active, and his restlessness is only an expression of his abundant energy. It is an imposition on him to make him sit silently and without movement for long periods as so often happens in a traditional school. Except when his interest is

engrossed in what he is told, for example when he listens to a fairy tale or a story of adventure, he likes to talk or do things himself.

In a very real sense, this is no new discovery. Even without the explicit formulation of a theory of activity, activity has in fact formed part of children's education from time immemorial. The youngest of mothers very soon discovers that the only way of dealing with children is to give them something to do, for this develops their skill while keeping them happy. The extension of this maternal wisdom to the field of formal education may have been tardy, but nevertheless such extension has taken place. Since at least the latter half of the last century, education has tended to become more and more activity-centred in both Europe and America. Some fifty years ago, Tagore began his great experiment in education by stressing the importance of freedom and activity for the child. If emphasis on activity is regarded as the essence of Basic education, it has to be admitted that its basic principle is not new even to India.

Nevertheless, Basic education introduced one new element in the concept of activity as related to schools. In Basic education, the activity chosen for the training of the child is a purposive, creative and socially useful activity. When a mother engages her child in some activity, she no doubt has a purpose, but the child need not be conscious of it. Nor is the child's activity in fact always creative or useful. Similarly, the activities emphasized in the schools of Europe and America do not take into consideration whether such activities have any social purpose or not. It is the addition of this element of social utility to the child's activity that differentiates Basic education from other types of activity-centred education.

The emphasis on social utility and purpose is not accidental or fortuitous. Production is the backbone of organized human life, for society lives by its capacity to produce the goods needed for its members. The level of production can be sustained by the co-operative effort of all. Basic education in its emphasis on socially useful activity treats the child as a member of the community from the very beginning of his educational life.

While educational thinkers in India and outside increasingly stressed the value of activity and freedom the system prevalent in India tended to become more and more book-centred. Even in the case of children it became more and more an exercise of the memory than a development of intellect, emotions and character. Overmuch concern with books tended to divorce education from the realities of Indian life. It often drew the child away from his social and cultural milieu and encouraged in him a distaste, if not contempt, for manual labour. The result is that the child trained up in the traditional way tends to become dependent upon a particular type of employment. If opportunity does not offer in that particular direction, he often becomes helpless and hopeless. As a result an average educated man in India often lacks self-confidence and initiative and flounders hopelessly when confronted with a new and changing situation.

Apart from its failure as preparation for life, the system is not satisfactory even from a purely educational point of view. Instead of aiming at the balanced development of personality, it tends to place an undue emphasis on the intellect. The will and imagination are neglected and, of the different aspects of the intellect, a greater emphasis is placed on memory than on reasoning and judgement. The result is that even the intellect does not attain its full maturity. The child acquires information but does not grow up into an adult human being.

Gandhi reacted against the prevailing system of education even though he was himself its product. His revolt started from its educational inadequacy but gained in strength because of the economic and social implications of the alternative he had helped to evolve. It would therefore be well to point first to some of the important aspects in which Basic education marks a departure from the form of education which has been prevalent in India in recent times. One fundamental defect of the traditional system is that instead of basing secondary and higher education on a well-planned and comprehensive system of elementary education, it has made secondary and primary education subsidiary and subservient to higher education. In a sense this was perhaps inevitable.

It is only in the last hundred years or so that the State has recognized that the provision of a system of universal education is one of its obligations. If this was so with national governments, one could hardly expect an alien government to provide such facilities for its subjects. The East India Company, and later the British Crown were interested in introducing western education primarily for utilitarian ends. It was a means of training a sufficient number of Indians in English to make the task of administering the country easier. It is true that a band of Christian missionaries and enlightened Indian leaders had different aims. There also were in the Government itself men like Macaulay who held that contact with western sciences and political thought would benefit the Indian people. The main emphasis on education however remained utilitarian. In consequence elementary and secondary education were regarded mainly as stages preparing the pupils needed at the higher stage. It was also inevitable that in such a context the needs of the rural areas, where the vast majority of the Indian people live, should be largely ignored. Basic education is seeking to remedy the situation in both respects. It places a far greater emphasis on rural needs and seeks to serve as a completed stage of education for the average citizen.

Another defect from which the system which the British introduced suffered was that it was essentially an individualistic system. For a century or more, it emphasized the theme of competition rather than co-operation between individuals and societies. This was not surprising, for like the educational philosophy which guided Britain during the nineteenth century, it was based on a misunderstanding of the theory of evolution. Though co-operation is at least as important for survival as competition there was a tendency to interpret evolution in terms of the struggle for existence among individuals and groups. The educational system of the day reflected this tendency and encouraged in the individual a desire to get on without regard to the general interest. Adherents of this philosophy believed that the general interest would be somehow served if each individual pursued his own ends.

Basic education also differs from the prevalent system in its

emphasis on the performance of concrete tasks and the joy which is its accompaniment. Traditional education particularly in the hands of unsatisfactory teachers tends to reduce all instruction to an intellectual drill. Because of its abstract nature the contents are often unintelligible and therefore uninteresting to the pupils. They do not understand what they are taught and fall back on mechanical memorizing. Information remains so much dead matter and does not become part of the texture of living thought. Since the child does not see the purpose of the education he receives he remains a passive and in many cases an unwilling subject who submits to rather than receives education. As opposed to this in education centred round a craft a child has immediate experience of the results of his labour. The product of the craft is to him a physical symbol of success and gives him a sense of achievement. Artists and scientists know that there is no greater pleasure in life than that which follows the successful accomplishment of a self-imposed task. Though in a lower key, children in Basic schools have a sense of similar exultation when they see the product of their own labour.

By its emphasis on manual work Basic education is helping to break down another barrier which has long divided Indian society. In origin the caste system may be traced to the need for the division of labour. It is also true that at one stage it was functional and had a large degree of flexibility. This was however soon lost and the ossification of caste led to a sharp division between intellectual and manual labour. In course of time manual labour acquired an element of social stigma. The impact of the British did not help to break down this repugnance to manual labour. The class consciousness of the British was added to the caste consciousness of the Indians and created a situation where the gap between different social strata became even more rigid than before. Simultaneously, economic and political conditions were creating a situation where such inequality could not last. Nevertheless the prestige attached to the so-called intellectual classes persisted. It was inevitable that in such a context the system of education prevailing in India should become essentially

bookish and literary. By its close correlation of instruction with manual labour and physical activities, Basic education is helping to break down the repugnance to manual work and inculcating in the minds of children a recognition of the dignity of labour.

The concentration on socially useful work has yielded good dividends in other respects as well. The children are engaged in crafts which lead to the production of material goods. The result of their labour is thus seen by them almost immediately. By giving them the satisfaction of tangible achievement, it serves to increase their self-confidence. It is common knowledge that confidence leads to enhancement of ability. Besides, the performance of tasks in co-operation with their fellows develops in the children a sense of social responsibility. Responsibility brings with it a sense of discipline, not imposed from above but evolved in the pursuit of their work. That children in Basic schools often display greater self-confidence and sense of discipline than children in ordinary schools is, therefore, not accidental. So far as innate qualities go, there is no reason why there should be any difference between children in the two types of schools. They all come from the same community with more or less the same social background. The only difference is in the atmosphere of the school and the method of teaching. In one case, the children are subject to discipline imposed from above. In the other, they are given freedom of activity within the limits prescribed by the schools. The fact that children in the traditional schools are all the time recipients and not contributors to society, while children in the Basic school are producers and conscious of the fact, can alone help to explain the difference in their deportment.

Of the various criticisms levelled against the traditional system, one of the most valid is that school subjects are chosen at random and often have no intelligible relation to one another. Thus a child may study history and mechanics and a classical language without any idea even on the part of the teacher as to why these particular subjects have been chosen. Basic education seeks to correct this defect by establishing an organic correlation between the different school subjects by drawing out their implications in

relation to a selected craft. In a sense, the idea of correlation is also not new. Educationists belonging to the most divergent schools have stressed the need of co-ordination in studies in order to develop the unity of mental life. Life of the individual is a constant adjustment between different functions and claims. Such adjustments cannot be made unless the different activities can be correlated to one another. It is essential that the child should be trained to correlate and co-ordinate his interests from early days. Basic education thus follows a sound educational principle in emphasizing the correlation between different school activities.

One word of caution must, however, be added here. While there is everything to say for the basic principle of Basic education—the correlation of intellectual subjects with the environment through the medium of a craft—we must not push the principle to absurd lengths. A pioneer in any field is apt to be carried away by his enthusiasm. There have been advocates of Basic education who claim that every subject from simple counting to thermodynamics can be taught through the medium of a craft. Such claims are obviously exaggerated and a little reflection makes it clear that correlation has its limits. One cannot teach algebra—to take a subject at the school level—through a craft except by resorting to unnatural and far-fetched devices. As for theoretical studies at a higher level—whether it be physics or metaphysics, chemistry or logic—they are still less amenable to the method of correlation. Everything is related to everything else, says Hegel, but it is surely a caricature of the Hegelian position to hold that the character of the Absolute changes every time an individual sneezes. Unless one is careful, one can lead Basic education to equally absurd lengths.

The principle of correlation must extend also to the community which the school seeks to serve. Since the school seeks to reflect the life of the community, it must choose a craft in relation to the local environment. It may seem like labouring the obvious but still it has to be stressed that if a craft without local roots is chosen, one of the main educational advantages of Basic education is lost. Basic education aims at developing the children's faculties through

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systematic and graded performance of activities connected with some familiar craft. If the craft is not one that is familiar, it may impose an undue strain on the children's energy and interest. The craft chosen for the school must therefore be one which has a natural relation to the environment. If this is not so the emphasis on a craft may, instead of helping to integrate the personality of the child, lead to the creation of a new hiatus.

The choice of a familiar craft is important for another reason. Succeeding generations show signs of mental and spiritual distance in all countries. Novelists and dramatists have often brought out vividly the conflict between fathers and sons. The risk of distance and conflict is greater in a country where the older generation is unlettered and the younger literate. The danger becomes still greater if the country is undergoing a process of rapid modernization. In such a situation, the children may develop an attitude of superiority to their elders. The elders on their part may develop an ambivalent attitude which on the one hand is suspicious of the new ways and on the other full of admiration for things they do not understand. They may also expect too much from literacy. The basic idea of Basic education—to build up the educative process round a familiar craft—can go a long way in obviating the danger and ensuring that the hiatus between fathers and sons does not become too great.

It is necessary to consider further the question of the selection of a craft for a Basic school. Since the education is essentially craft centred, the choice of the craft may make all the difference between success and failure. We have already pointed out that the educational significance of a craft would depend largely on the place it occupies in the life of the community. Now we have to go a step further and indicate limitations which follow from over-emphasis of any one craft. Basic education seeks not only to train the future citizen but to do so under conditions which are as close to life as possible. It is therefore essential that the Basic school must reflect the life of the community. No community can survive, let alone flourish on any single craft. If therefore a Basic school is engrossed in only one craft, it would to that extent fail to reflect

the many-sidedness of life. Spinning and weaving have often been regarded as the only crafts suitable for Basic schools. While the importance of spinning and weaving cannot be ignored, it has to be remembered that concentration on them to the exclusion of other crafts would violate a fundamental principle of Basic education.

Concentration on one craft is inconsistent with the spirit of Basic education in another way. In formal and academic teaching a prescribed syllabus is binding on the pupil as well as the teacher. Schools are more concerned with completing the syllabus before the date of the examination than with preparing future citizens of the State. Basic education claims that learning through activity gives a wider freedom to both the teacher and the taught. This cannot however be ensured in the absence of alternative crafts. Restriction to one craft means that teachers and children with different tastes and abilities have no freedom of choice. Alternative crafts are thus necessary for three reasons. Multiple crafts tend to reflect something of many-sidedness of life. Different crafts meet the requirements of children and teachers with different abilities. Still more important the presence of alternative crafts gives to the child a sense of freedom of choice.

The above discussion should make it clear that on educational considerations alone there is an unmistakable case for the gradual conversion of all existing elementary schools into Basic schools. The educational argument is given added strength by the economic situation in India. Gandhi was attracted to the system as much by its educational value as by his feeling that its introduction may well be the only means to make education accessible to all. Our present economic backwardness cannot be denied. Any system which is expensive would therefore have to be ruled out in our present context, however desirable it may otherwise be. Basic education by its emphasis on craft aims to make education at least partly self-supporting. The products of the children's labour have social utility and can therefore be absorbed in the social economy. For various reasons the best utilization of such products is in the school itself. If part of the food and clothing of

the teachers and the pupils can be met from the products of their labour one big item in the educational budget of the nation would automatically be met. Further, it would give both pupils and teachers an added incentive and a sense of fulfilment if they find the results of their labour coming back to them. If after meeting these requirements of pupils and teachers there is still some surplus, it could be utilized for meeting some inescapable school expenses.

The economics of Basic education has to be carefully worked out, not only to test its claim that it makes a system of national education feasible, but even more to ensure that its educational value is not impaired. Over-emphasis on production carries with it the risk that the school may be turned into a factory exploiting child labour. The risk is made greater by the fact that Basic education makes far greater demands on the teacher than the traditional school. We have indicated how Basic education eases the burden on the pupil by bringing greater variety into school work and breaking the monotony of reading and writing by intervals of productive labour. Liberation of the pupils from a prescribed syllabus however places on the teacher the task of co-ordinating all school activities. This imposes on him a constant strain, for he has continually to find solutions to problems as they arise. The traditional teacher can fall back on a set routine but the teacher in a Basic school has no such easy way out. So long as Basic education is carried out by a body of devoted pioneers, there is not much risk in this. When, however, the system expands and the early missionaries are replaced by professional men, not all of whom can be expected to have a sense of dedication to the work, there will be a real risk that the teachers may concentrate on those aspects of Basic education where success or failure can be easily measured. Since the creative aspects of education are intangible and cannot be measured, the spread of Basic education involves a distinct risk that teachers may fall back on increase of production as the only measure of their success. To find out if a school has produced a prescribed quantum of goods is simple. It is not so easy to judge whether it has developed the character of the pupils and given them an appreciation of the values of life.

It is of course clear that in the first two or three years, the goods produced by the children can have little economic value. As the children grow up and acquire greater skill, the goods they turn out should improve in quality. Insistence on standards is necessary as a part of education. If the children are properly trained and do their work with skill, care and conscientiousness, there is no reason why the products should be unsatisfactory or shoddy. If a thing is to be done at all it ought to be done well. There is no virtue in amateurishness or lack of skill. Production of goods of good quality is therefore part of the training children must receive in schools.

It cannot however be stressed too strongly that the school is a centre for training citizens of the future and *not* a factory for turning out goods for current consumption. The craft on which education is centred should draw out the abilities of the child and make him realize the organic nature of society through its correlation with other subjects. Some of the goods produced by the child should and will be saleable, but there should be no attempt to make saleability the sole criterion of his work. It ought to be remembered that even a child of fourteen or fifteen is at best an apprentice. Any attempt to make him a skilled artisan at that age can be successful only if standards are kept low. From the point of view of the community, it is better that an adolescent should be a half-trained technician of promise than a finished craftsman of a low order.

One other consideration should be kept in mind in discussing this question. The training itself will differ according to the end in view. If the aim is to increase production, the trainer will concentrate on increasing the skill of the trainee. This can be done best by breaking up the process of production into various stages and making each trainee specialize in one particular item. If the aim is the education of the child, the teacher will, as soon as it has acquired a fair degree of skill in one, transfer it to a new item in the process of production. If a school of carpentry seeks to produce a larger number of chairs, every pupil in the school will specialize on one particular item in the production of chairs. If on the other

hand the aim is to turn out good and skilled carpenters, every pupil will be made to go through every stage of carpentry. There is bound to be some loss in productive efficiency by such transfers but it would be more than compensated by the enlargement of the experience and the enrichment of the personality of the pupil. It cannot be emphasized too strongly that production in a Basic school is essentially a by-product. While any income derived from the sale or utilization of such products is welcome, it cannot and should not be expected to contribute more than a very small share towards the nation's educational budget.

The expansion of Basic education and the induction of large numbers of teachers without the missionary spirit make it necessary to devise safeguards against the conscious or unconscious exploitation of children by overzealous or pedestrian teachers. A teacher with vision and imagination can make the children do great deeds but there is a risk that the routine teacher may seek to emulate his example by forcing the children beyond their capacity. Some kind of a limit may, therefore, be set to measure the volume of work expected of children. Careful and extensive experiments are necessary before this can be done, and in any case, such limits must be flexible and vary according to the nature of the institution and the craft.

Some who have considerable experience of Basic schools hold that it would be enough if the cost of the raw material utilized for crafts is recovered, but this does not seem adequate. The longest experience of Basic education is available in Bihar. Some of the schools there have recovered as much as fifty per cent. or more of the total expenses of the school, but for various reasons, it is doubtful if the experience of these pioneer institutions can be repeated elsewhere. Many Bihar schools have however earned double the amount spent on purchase of raw material for the craft, and this seems a reasonable demand. One may perhaps say that at least twice the cost of the raw material used plus the depreciation of the equipment ought to be recovered from the work done by the teacher and the pupils. If this is not done, it would be a reflection on the efficiency of the teacher. Similarly, an upper

limit might be fixed at about twenty to thirty per cent of the expenses of the school. There would be a strong presumption that if this limit is exceeded, the teacher is placing greater emphasis on the productive than on the educational aspects of the craft.

The Central Advisory Board of Education has considered this problem in some detail. It has heard the views of some who started with the claim that the school should and can be completely self-supporting, but on being pressed conceded that it would be enough if the children learnt to be self-reliant in all things. The Board after careful consideration declined to prescribe any fixed proportions of recovery and contented itself by recommending that equal attention should be paid to the academic and the productive aspects of Basic education if the system is to succeed.

Over-emphasis on the productive aspect of craft is thus a danger which Basic education must avoid. This does not however imply any criticism against the system as such, for there is no system in the world which cannot be abused. The provision of multiple crafts has a special importance from this point of view as well. Many crafts will mean greater diversity for both pupils and teachers and help to emphasize the educative rather than the economic aspects of Basic education. At the same time, it would in the long run contribute to the economic betterment of the country. Multiplication of crafts is particularly needed in a country like India which suffers from widespread poverty. Basic schools with multiple crafts would create the foundation for the expansion of industry and trade. The experience of Soviet Russia in the early days justifies such a hope. The progress of universal education received a great impetus when education was built round different crafts. Children as well as adolescents were offered the prospect of improving their skill and earning capacity. This was the first step towards polytechnization of schools, and polytechnization supplied the foundation on which industrialization and development of Soviet Russia has been built. The spread of Basic education may well be the beginning of such polytechnization for India.

Freedom and organization are the two principles that ensure not

only the progress but the very survival of society. A spirit of freedom and of loyalty to the organization must therefore be inculcated in the child from the beginning of his conscious life. That is why the Basic school has as one of its foremost aims the development of spontaneity and social sense in the child. Spontaneity leads to the flowering of all the faculties of the child. Social sense gives him a sense of responsibility and makes him aware of himself as a productive agent in society. The system of class ministers and executives develops initiative and the sense of responsibility. Corporate activities emphasize the value of co-operation. Together, they make education real to the children, for they feel that they are members of a community. In our prevalent types of education, the child is *told about* society and what he ought to do. In Basic education, the child is made to *live as* a member of the community. One is verbal instruction and therefore twice removed from life. The other is actual participation in the life of the community and therefore direct training in citizenship.

A Basic school should therefore be an example of democracy in action. Whether this idea is achieved depends largely on the quality of the teacher. Like all democracies, the school community can function effectively only if there is intelligent and adequate leadership. I have already indicated that with its freedom from textbooks and a prescribed syllabus, Basic schools make great demands upon the teacher. I have seen Basic schools where there were attempts to correlate the teaching of physics or chemistry to the craft of spinning, but the children had no idea of the area or size of the classroom, or even of their own weight and height. I have seen other Basic schools where learning was one continuous and exciting adventure of discovery of the environment by the children. In any system, it is ultimately the teacher who matters, and in the Basic school he matters even more than in the ordinary school.

Happiness is in a sense the end of all human activity. In fact some psychologists have defined happiness as the satisfactory performance of a function. The imposition of books and dead routine

has caused much misery to children by enforcing prolonged periods of inactivity. Basic education seeks to remove this by offering the child an opportunity of free and spontaneous but purposive and useful activity. The introduction of crafts makes the school more vital and interesting to the child and breaks the monotony of merely academic or literary work. If, however, too great an emphasis is placed on making the schools economically self-sufficient, the craft may become for the children a wearisome burden rather than a pleasurable creative activity.

National programmes of education in almost all countries seek to make learning a joyful process. Efforts are constantly made to lessen the fatigue and monotony and to increase the interest of pupils. This healthy tendency must be encouraged by every means in India. It is the more necessary to emphasize this point in the Indian context, as we often have a tendency to exalt suffering for its own sake. Ascetism has always had a strong appeal to many Indians. Persons with a strong sense of idealism feel that to give up pleasure for the sake of their cause is the test of their sincerity. Suffering for the sake of an ideal may ennoble a person, but we must remember that suffering in itself has no value and can be justified only as a means to an end. Among some teachers in Basic schools there is a tendency to exalt suffering or austerity for its own sake. Unless such tendencies are checked, there is a danger that Basic education, instead of being a great release of the creative urges of the younger generation, may become a check and a deterrent.

Basic education truly understood liberates the child from monotony and boredom by combining mental and physical work and making academic subjects grow out of the activities of a craft. It seeks to create an atmosphere of freedom and joy in the school. Basic education is therefore good for the child, for it helps him to develop his personality through freely chosen and self-initiated activities. What is good for the child is good for society as well. One advantage to society has already been pointed out. By meeting at least in part the expenses for a national system of universal education, Basic education helps to make education accessible to

all. It also helps to overcome the objections of those who seek to judge all human activities in terms of social utility. All agree that education is productive in the long run, but the short-term difficulties often prevent the realization of the long-term gains. Judicious investment no doubt yields profit but what is one to do if there is no capital to invest? It is to this question that Basic education attempts an answer. Basic schools seek to prove that education need not be an investment yielding only indirect and distant profits, but one in which the returns can be direct and immediate.

One final word of caution is necessary before this study is concluded. From the nature of the case, the change-over from the traditional to the Basic pattern of education must be gradual. The conversion of over two hundred thousand schools and retraining of almost a million teachers must necessarily be spread over many years. Since the two systems will have to continue side by side during this transitional period, it is necessary to ensure that there is no antagonism between them. We should not therefore encourage the idea that the conversion means a violent break with the past. We should rather look upon it as a reassertion of certain old values which for various reasons had been forgotten or ignored. That young children should be trained through activity, that all school subjects should be taught in an integrated manner and that education should be purposive are self-evident truths. All good educationists have recognized these principles in practice even though they may not have always formulated them as explicit theories. Nevertheless, the conscious acceptance of these principles is of sufficient importance to make the Indian decision to convert elementary education to the Basic pattern one of revolutionary significance.

September 1953.

THE RECONSTRUCTION OF SECONDARY EDUCATION

It is sometimes said that the most important problems of education from a national point of view are those which relate to elementary or adult education. These are certainly important but nevertheless the statement cannot be given unqualified acceptance. For one thing it is not possible to draw a rigid line between the different stages of education which imperceptibly merge into one another. For another all teachers at the elementary level are products of the secondary schools. Teachers engaged in adult education will also be drawn mainly from the same source. Reconstruction of elementary or expansion of adult education would therefore be impossible without a corresponding extension and reconstruction of secondary education. Again the determination of national policy depends largely on the decisions of the national leaders. They are in the main derived from those who have received higher education. The full benefit from such education cannot however be derived if the preparation at the secondary stage has been incomplete or defective.

Secondary education has therefore a vital role to play in any programme of education for the community. It provides teachers for both elementary and adult education. It also prepares pupils for the universities and other institutions of higher learning. Besides it is the stage which in all countries marks the completion of education for the vast majority. Even the minority which goes for higher education cannot take full advantage of the wider opportunities offered by the universities unless they have received their grounding in a system of sound secondary education. If for no other reasons these considerations alone demand that secondary education must be of the highest quality if it is to satisfy the needs of the modern age.

There is another reason why the quality of secondary education must be adequate. In any community, the vast majority give up schooling at the close of the elementary stage. The small minority which goes beyond the secondary stage may provide the higher leadership but if the purposes of that leadership are to be translated into effective programmes of work, there must be a large number of persons who have the requisite knowledge, training and character to carry them out. A few top leaders may initiate policy, but the execution of the policies will depend upon intermediate grades which have the knowledge and imagination to understand the objectives of the leadership.

Secondary education can and ought to train this large body of intermediaries. They will be the executants of policy decisions taken at the highest level. Those who complete their education at this stage must therefore acquire knowledge and competence and also develop qualities of leadership and character. Some of them will go further and constitute the higher leadership, but the others must at least be able to perform the duties of middlemen who will interpret the purposes of the leadership to the rank and file.

It is generally agreed that one of the main objectives of secondary education is to develop among the pupils qualities of leadership needed in different walks of life. Elementary education seeks to provide the basic information and skills needed for survival. Higher education seeks to extend the boundaries of knowledge and is often an end in itself. Secondary education is the connecting link between them and also serves—or at least should serve—to select those who are to provide higher leadership to the community.

It is obvious that access to education must be expanded if a democracy is to be real. At the same time we must remember that mere quantitative increase in education is not enough. Unless the quality of education is also improved, spread of mere literacy may create more problems than it solves. There is one aspect of such expansion of facilities which has been causing concern to educationists throughout the world. Quantitative expansion

always carries with it a risk of deterioration in quality. Without improvement in the quality of education there is a danger that increase in its spread may only increase the destructiveness of man. Wars in the past have often been the result of parochial prejudices. With limited scientific knowledge and restricted means of communication, the effects of such wars were also limited. War in the modern world means almost certain destruction of all that man stands for. We have therefore to ensure that extension of facilities will not lead to a lowering in the standard of education. We have further to ensure that education will develop in man a free and creative spirit, while preserving the social values of divergent cultures. In the past these have been preserved by a small minority which had access to knowledge and the higher values. With the spread of education they become accessible to all but this carries with it a risk that the values may degenerate.

We have to guard against another risk. Expansion in the facilities of education may also lead to regimentation. Whenever we are dealing with large numbers, there is a temptation to take the line of least resistance and find solutions which will apply by and large to the masses. The highest values are however attained in isolation and each individual must himself work out his salvation. Multiplication may blind us to this fact. We may confuse the extension of facilities with the enrichment of personality. The problem of regimentation is not so serious at the elementary level. There are at least three reasons why this is so. Children at the elementary age are no doubt highly impressionable but they are also highly resilient and individualistic. Their individualism and resilience would in any case largely protect them against being set in too rigid patterns but their best safeguard against the danger of regimentation is the shortness of the duration of the junior elementary course. It is not long enough either to give them the body of knowledge needed for their later life nor to establish habits on a permanent and unchangeable basis. Since it seeks to impart only basic information and skills it must from the nature of the case be the same for all. When however we go beyond the elementary stage any attempt at such uniformity may degenerate

into regimentation. If this happens, there is a risk not only of obliterating qualitative differences but also of making it more difficult to decide about the choice of a future career. Worse still, it may create a temper in society where all existing values are accepted blindly or equally blindly denied.

II

While the importance of secondary education in a democratic society is thus beyond question, it has to be admitted that it has generally been considered as the weakest link in the Indian educational chain. Universities complain that the products of the secondary schools do not come up to their expected standards. Educational administrators question their competence to serve as teachers in elementary or social education. The public feel that secondary education does not serve its main purpose in developing among the pupils qualities of leadership needed in different walks of life. Because of the unsatisfactory quality of secondary education, both elementary and higher education have suffered.

Reference to any section of public life or the industrial field brings out the weakness of the Indian secondary system. In public life the disparity between the leadership and the following was shown up tragically in the upheavals which followed the partition of the country. In the fields of knowledge and industry we have a small number of scientists, engineers and technologists of great competence. We have large numbers of workers who in potential skill and efficiency are not inferior to their fellows elsewhere. Nevertheless the productivity of an Indian worker is generally less than that of his American or European counterpart. This is not due only to a difference in the degree of mechanization. Even the same types of machines show a poorer return in India. The only reasonable explanation of the difference is the absence of a cadre of well-trained and efficient intermediary leaders corresponding to foremen or chargemen in a workshop.

One of the main defects in our system of secondary education has been that it lacks a clear definition of its objectives and scope. It has generally been treated as a mere continuation of primary

education or only as a preparation for higher education in colleges and universities. Because it is regarded as only a continuation of elementary education children tend to go to the secondary schools not because they have any special competence but because they have the economic means of continuing their studies. For similar reasons adolescents continue beyond secondary education not because they have the necessary ability but only because they have the necessary financial resources. Since secondary education has not been thought of as a definite stage with special characteristics of its own the whole structure of secondary education in the country is amorphous and vague.

There are historical reasons why the scope and functions of secondary education are generally less clearly defined than those of elementary or higher education. In the past education was the prerogative of only a minority who sought to acquire as much knowledge as possible. We are sometimes astonished at the encyclopedic learning not only of savants but also of princes and men of leisure in earlier times. They had no occasion to differentiate between different subjects or levels and took all knowledge to be their province. Since education was regarded as the search for truth without much thought for its possible practical applications the minority which was interested in such intellectual pursuits recognized no limits to what they sought. The vast majority on the other hand were content to acquire the skills required for their professions and this was not usually recognized as education. The division of education into elementary, secondary and higher education is therefore a comparatively recent phenomenon. This explains why in almost all countries the limits of secondary education are uncertain. In the United States a debate is raging today on the scope and functions of secondary education. Some hold that it is primarily functional and intended to enable one to earn a livelihood. Others regard it as general education which will give the community better men and women.

There are some special reasons why the definition of the objectives and scope of secondary education proved even more difficult in India. The present system of education in the country

was established in the early decades of the nineteenth century with two main ends in view. There was a number of British educationists and reformers who thought that contact with western science and political thought will bring about an Indian renaissance. There was a larger number of administrators who sought to create an educated class who would help in carrying out the administration of the country according to British ideas. It was obvious that officers could not be brought over wholesale from Britain. The top positions were reserved for the British, but the administration required a large number of functionaries at secondary and tertiary levels. The administrators wanted to train Indians to fill up such posts. The objects of the two groups were thus different but they worked towards the same end which was the introduction and extension of the western modes of education in India. They were greatly helped by the interest shown in western education by Indian leaders who hoped that this would lead to the regeneration and liberation of the country.

However different their motives, all these groups worked for the same end. They also believed in what may be called a 'Permeation Theory' of education. They held that if there is a small minority of highly educated people, their example will inspire larger numbers to adopt the new educational ideals. The modern system of education would thus percolate from higher levels till it covered the entire community. Following Macaulay's famous Minute regarding the educational policy of the future, the government of the day declared that 'the great object of the British Government ought to be the promotion of European literature and science among the natives of India; and that all the funds appropriated for the purpose of education would be best employed on English education alone.' The resolution also stated that provision should be made for the continuance of schools and colleges where indigenous learning was being imparted, but this soon became the expression of a pious hope. As education in the English schools became a passport for entry into Government and mercantile service, the members who flocked to them continually increased. In fact, some of these newly educated Indians acquired

some of Macaulay's contempt for the ancient learning of the East

It may be said that the modern system of education in India, so far as the State is concerned, began with the establishment of the universities in 1857. Since universities could not function unless students came up from secondary schools, secondary schools were also established on an increasing scale. They in their turn led to an expansion of primary education. It thus seemed as if the 'Permeation' theory was leading to the expected results.

The upshot was that the universities dominated the entire field of education. Secondary schools concentrated on preparing students for the universities. The mother-tongue was neglected even as a medium of instruction. Very little was done to train teachers for the elementary or the secondary schools. The courses of study became academic and unrelated to life, as there was no provision for vocational or technical courses in the universities. In fact, universities, through the matriculation examination, began to dominate not only secondary education but even the education imparted in primary schools. The fact that, in the earlier days, a university degree was almost a guarantee for profitable employment made the domination of the universities even more absolute.

The dominance of the universities has also led the secondary schools to place a disproportionate emphasis on the development of the intellect. It is not even the development of the intellect as a whole but only that aspect of the intellect which relies upon the memory and expresses itself through linguistic ability. The system of instruction offered in schools is suited to the tastes and aptitudes of only a few. It has neglected the development of the imagination as well as manual and sensory skills at various levels. Except for a minority of children specially gifted in language the rest often find their school education uninteresting and uncreative. The school does not therefore call out the best in them. They pass through the school but do not take full advantage of even the limited opportunities which it offers.

Because secondary education is isolated from life, it does not give the pupils insight into the everyday world. When they pass out of school, they feel ill-adjusted and cannot take their place

confidently and competently in the community. This divorce of education from the realities of life has led to a dangerous estrangement of the individual from his social milieu. It has created an artificial barrier that divides its products from the rest of society. It results in a break-up of the sense of community and leads to a fragmentation of society into disjointed segments. The sense of community is necessary for the survival of both the group and the individual. Obviously, the group cannot last unless the members feel that they belong. This sense of 'belonging' is essential also for the well-being of the individual. An individual who lacks the support of the group has to live under constant strain and soon becomes dispirited and lost. In the end such loss of social support leads to a fragmentation within the individual himself.

It is not necessary to give a detailed account of the defects of the existing system of secondary education in India. Many of these are well known and have been repeated from a hundred platforms. It is however necessary to point out that in spite of these defects, the existing system has also produced many splendid teachers and fine students. In any case wholesale condemnation of the existing system of education is of little use. Reform and improvement of any system require careful study to discover defects and suggest remedies. It must also be remembered that a system of education cannot be changed overnight. One cannot write on a clean slate but only add a little here and rub out a little there and continue with such small modifications, though in the end their cumulative effect may be to transform the old system beyond recognition.

III

We may now consider certain special problems which secondary education in India has to face. They make reconstruction more necessary and at the same time more difficult. The first is a re-definition of the relation of secondary education to elementary and university education. This is a difficult problem anywhere. In the United Kingdom the debate has not yet ended as to whether secondary education in its earlier years should overlap elementary education or move along a separate stream. At one time there was

a pathetic faith in the magic of eleven-plus. Educationists, reinforced by a group of psychologists, held that at eleven-plus children could be divided between those who were suited for higher academic courses and those who were not. Experience has not confirmed the faith of optimists. The I.Q. is no longer regarded as infallible. There is, therefore, greater readiness today to recognize the need of flexibility in the uncertain years which divide elementary from secondary education.

In India a correct demarcation has become important because of the decision to provide Basic education at the elementary stage. Basic education seeks to impart instruction through the medium of a craft. However appropriate such a technique may be at the elementary level, it is bound to raise difficult problems of correlation between the academic and the practical subjects at the secondary stage. In addition, Basic education overlaps with the earlier stages of secondary education where diversification and differentiation begin to introduce a principle of abstraction in education. A broad and imaginative conception of Basic education would of course largely help in resolving these difficulties. Basic education seeks to be a reflection of life. In life diverse elements retain their differences and are yet correlated in the unity of experience. Basic education, so far as it is a true reflection of life, would therefore exhibit the diversity of reality and make the transition to secondary education easier and not more difficult.

There is one school of thought which insists that the first eight years of schooling must follow the Basic principle, and be uniform in character. This may be followed by three or four years of secondary education. A second school holds that only the first five years need be of a common type. Thereafter the students may be divided into two broad groups. Those who intend to go for higher education would for three years read in what may be called the Junior Secondary School. Those whose education is to end at the elementary stage, would follow a three years' Senior Basic course. A third school holds that there must, in addition, be provision for a third category of pupils. They will not complete their education at fourteen, but instead of going for a higher academic

course, they will take up a vocational course of two or three years' duration.

The only safe principle one can lay down in such matters is to insist that there must be no rigid or watertight division between these alternatives. To insist that every one must follow exactly the same course till fourteen seems unjustified. There is evidence that differentiation of aptitudes and interests does in some cases begin to show at eleven-plus or even earlier. On the other hand, it would be unjustified to insist that the separation of the sheep and the goats must take place at eleven-plus. There must therefore be provision for different types of courses after eleven-plus. Parallel courses with an academic, technical or vocational bias should therefore be provided in these latter years of elementary education. There must also be perfect freedom of moving from one stream to another at any time between the ages of eleven to fourteen. One may indeed go further and say that if a child develops any new aptitudes or interests after fourteen, there should be no bar to his or her being diverted from one type of course to another.

Once the relation of Basic and secondary education has been determined, the relation of secondary to university education will be comparatively easy to settle. Secondary education must be a complete stage in itself. It must be recognized as preparation for life for all vocations excepting those which require high scientific, technical or professional training. There must also be equivalence between different types of secondary education, so that given the competence and the will, pupils from any one of the courses may shift to any other course or move up to the appropriate stage of higher education.

Another problem which faces secondary education in India arises out of the diversity of languages. Till recently one of the main weaknesses in the system of secondary education was the use of English as the medium of instruction. This imposed an undue burden on the majority of the pupils and hampered their full development. Further, it widened the gulf between the educated minority and the vast majority who were denied the benefits of school education.

Beginning from the thirties of the present century the change over to an Indian language as the medium of instruction has taken place on an increasing scale. Independence has accelerated the process and today the medium of instruction in secondary schools is almost invariably the mother-tongue. This has however created two fresh problems. The first is the hiatus between the medium of instruction in the schools and the universities. Pupils who study through an Indian language in a secondary school are suddenly confronted with English as the medium of instruction in the colleges and universities. In many cases they are unable to follow the lectures and derive full benefit from the education they receive. Standards of universities have also been forced down in consequence. It has been suggested that one reason of indiscipline among young college students is their inability to follow the lectures they are compelled to attend.

The other difficulty arises out of the multiplicity of Indian languages. The Constitution has recognized fourteen languages. Thirteen among them are spoken by millions and have a long and splendid tradition of literature. Their claim to be used as media of instruction is therefore irrefutable. The advantage of using the mother tongue as the medium of instruction is however balanced by the disadvantage of many media within the same country. Multiplicity of languages may weaken the sense of Indian national unity. It does make the movement of teachers and students from one region to another more difficult. With all the drawbacks of an alien language, English has rendered two great services in India. It has served to unify the people and develop in them a common national consciousness. It has also made it possible for teachers and pupils to move from one end of India to another without any feeling of difficulty or strangeness.

The problem of languages has been carefully considered by Indian educationalists. The Secondary Education Commission has also paid a great deal of attention to it. In the light of the debates which have been held, a solution appears to be emerging on the following lines. There is no difference of opinion that the mother-tongue must be the medium of instruction throughout

the elementary and the secondary stage. Opinion is divided about the medium at the university stage, but gradually the claim of the regional language is gaining in support. In order to maintain the unity of India, Hindi which is the official language of the Union should be introduced at the end of the junior Basic stage and continue as a compulsory language for at least three years. Facilities and in fact encouragement should be offered for its continued study beyond this stage. In view of the importance of English, as a vehicle of modern scientific thought and a medium of communication in the international field, its study should also be encouraged by providing facilities after the junior Basic stage, subject to the principle that two languages should not be introduced in the same year. For students who wish to go beyond the secondary stage, Hindi and English should for all practical purposes be compulsory subjects of study. In addition, facilities for the study of a classical language should be offered to all who have special interest in or aptitude for languages.

It may be an advantage to indicate the pattern which would follow from such an arrangement. Those who do not propose to go beyond the elementary stage would study only the mother-tongue. For those who wish to go to the secondary stage or beyond, at least two other languages, Hindi or another modern Indian language if the mother tongue is Hindi and English, would be necessary subjects of study. Pupils with a special aptitude would study additional languages at their own option. It may be argued that it would be placing an undue burden on the majority of secondary pupils to insist that they should read three languages. If they were required to study the literature of these languages, the objection would be almost unanswerable. For the majority however the study would be confined to only a working knowledge of two of the languages. Besides, in the special circumstances of India there seems no escape from this solution. Also, the experience of countries like Belgium, France, Switzerland and Russia proves that where suitable methods are used, three languages are not an undue burden.

Another special problem of Indian secondary education is to

determine the place of technical and vocational subjects in the school curriculum. Traditionally India has given a higher place to intellectual and abstract subjects than to practical courses. The stratification of caste—in which the highest position was given to the Brahmin—is ample evidence of this. The honour and dignity of manual labour has not always been fully recognized in India. The impact of the British class system on Indian caste did nothing to correct this attitude. A gentleman was at one time described as a person who did not work with his hands. The academic courses introduced under British rule guaranteed white-collar appointment to the educated and gave added strength to their aversion to manual labour. This has made it the more necessary to ensure that technical and vocational courses do not suffer in a reconstruction of secondary education in India.

The principles governing the selection of pupils for a higher stage of education deserve serious and anxious thought of all educationists. Reference has already been made to the concern expressed in the United Kingdom in diverting groups of children into different courses at eleven plus. In a country like India where educational facilities are still grievously inadequate to the needs the question of selection acquires a special significance. Every pupil in a secondary school is in a sense privileged and we have to be careful that this privilege is based on merit. With so few places available we must ensure that children with the requisite ability are not denied the opportunity they deserve and others obviously unsuited do not fill up the few available places.

It has to be admitted that till now there has been no proper selection of pupils in India. They have entered secondary schools and continued beyond only because their families were in a position to meet the necessary expenses. India has thus lost the services of some of her potential leaders while persons of inferior quality have taken their place. What makes the position still worse is that the number of good schools is so few and yet admission is largely confined to the well-off classes without regard to the capacity of the pupil. The result is national wastage in a double sense. Talent has not had the scope to develop while the meagre resources have

been eaten up by those who could not fully utilize what was offered to them. It is only recently that a beginning has been made to relate educational opportunity to ability.

IV

It has become increasingly clear that a thorough reconstruction of secondary education is necessary if it is to fulfil its purpose. Efforts at improving its quality have therefore been persistent for at least the last fifty years. The most important attempt at building up a creative and new type of secondary education suited to the needs of resurgent India was made by Rabindranath Tagore. In his school at Santiniketan, he sought to give children the opportunity of the fullest development by providing them with creative activities of different types. In a reaction from the predominantly bookish teaching of the day, he sought to develop the faculties of children through close and constant association with nature. Routine and curriculum were reduced to a minimum and the widest possible scope was given to the exercise of the children's ingenuity. While deeply embedded in the Indian tradition, the school was alive to the spirit of the modern age. Tagore conceived Santiniketan, and later Visva-Bharati, as a true meeting place of East and West. He has given a wonderful description of the experiment in *The Poet's School*. It is enough to mention here that practically every new development in Indian education since the beginning of the century owes something to the work which was initiated at Santiniketan.

The great experiment of Basic education initiated under Mahatma Gandhi's leadership has also led to re-thinking on education. It has transformed Indian ideas about elementary education and its effects are now being felt at the secondary level. Gandhi defined education as 'that which gives true freedom'. The basic freedom in his view is freedom from fear and this cannot be attained unless men are free from want. Basic education seeks to secure to all individuals this freedom by making them capable of meeting

their urgent life needs while at the same time developing in them the vision of a new social order where these needs can be met by truly human means. The completion of the Basic stage should enable pupils to achieve a reasonable competence and self-reliance in the management of their own lives and train them in habits of co-operation. Since Basic education is completed at the age of fourteen, it is obvious that much that is of great importance in life cannot be included in the programme of a Basic school. For one thing, children of fourteen are not yet mentally and physically prepared to assimilate some of the most important lessons of life. For another, knowledge and skills acquired by that age are yet too new to become an essential ingredient of the personality.

The aim of post-Basic education has been defined as the preparation of the adolescent for 'wise parenthood and creative citizenship'. It seeks to extend the use of a craft to secondary education and thus on the one hand break down the distinction between work and knowledge, and on the other, make education economically more self-sufficient. The emphasis is throughout on social relations and the object is to develop in the individuals habits of co-operative action to meet all the physical, intellectual, aesthetic and moral needs of the members through their own work.

The programmes of educational reconstruction at all levels received a fresh impetus with the introduction of Provincial Autonomy in 1937. Since then and particularly since 1947, the State Governments have also been actively interested in initiating reforms of various types. Many States appointed their own committees which suggested measures of reform and improvement of secondary education. While there were thus many regional or sectional surveys, no comprehensive survey for the country as a whole was attempted till the Lakshmanaswami Commission on Secondary Education submitted its report in 1953.

Among the many important recommendations of the Commission, pride of place may be given to that for the establishment of a number of multi-purpose schools. The importance of this recommendation for the reconstruction of Indian secondary

education cannot be too strongly stressed. Unless we have schools which offer a variety of courses, secondary education cannot fulfil its main objectives. As we have seen, one of the main defects of the existing system is that it is unilinear. All pupils in secondary schools have at present to follow more or less the same pattern. This retards their growth, for it is obvious that the same pattern cannot suit all. A broad division can be made of pupils into those who have a practical bent of mind, those who are fond of mathematics and sciences, those who are sensitive to one of the fine arts and those who have an aptitude for the humanities. The problem of secondary education in India—and perhaps in other countries as well—is to provide diversified courses for them while maintaining a core of common subjects for all.

Secondary education deals with boys and girls just when they are changing from childhood into early youth. The whole period of adolescence is thus covered by secondary education. The characteristics of childhood are on the whole well marked and uniform. One is therefore on relatively safe ground in dealing with children. They have to be given a certain amount of information and trained to certain habits of thought and action. We may also adopt a more definite attitude in dealing with grown-ups since their habits and attitudes are already comparatively set. Adolescents are neither children nor adults. What is more disturbing, they pass from one phase to the other with bewildering speed. They are then passing through physical, psychological and emotional changes of profound significance to the individual and the community. They must therefore be treated with special sympathy, care and imagination. Any attempt to continue the methods of elementary or to anticipate those of university education at the secondary stage is therefore attended with grave risks.

Since the onset of adolescence is marked by the emergence of differences in taste and aptitude, secondary schools must cater to the diverse needs of the adolescent. There may be some justification for a fairly uniform system of elementary education. Children must develop all the necessary basic skills. Besides, their aptitudes are generally undifferentiated at this early stage of life. As children

grow into adolescents, the situation is radically changed. With growing differences in taste and aptitude, the case for a uniform type of education is gone. Each adolescent must find in the school something which calls out its latent qualities. The only way of doing so is to offer a more diversified course which will ensure that every pupil in the school can find something to suit his or her taste.

The establishment of multi-purpose schools is intended to meet this special need. Reform of secondary schools would have been necessary in any case, but the need has become greater on account of the adoption of Basic education as the pattern of elementary education throughout the country. Pupils of Basic schools will receive training in academic skills only in the context of other socially useful activities. A purely literary type of secondary education will not suit them. They have a right to expect that the principles they have learnt at the elementary stage will be given wider scope during their period in the secondary schools. Wider choice to the pupils will also mean greater development along selected lines. Such an arrangement alone can lay a sounder basis for the specialization we expect in universities, and other institutions of higher learning.

In some countries, this need to provide diversified courses has been met by establishing different types of secondary schools. It cannot be said that the experiment has been a complete success even in a country so conscious of the dignity of labour as the United States. There is at times a suggestion of inferiority in the technical or other vocational courses provided in separate schools. In a country like India, where tradition exalts intellectual at the cost of manual labour, provision of different courses in different schools would have confirmed the social aversion to manual work. The provision of technical, agricultural or other professional courses in the same school and under the same conditions as purely academic courses will be a visible symbol of the equal worth of these disciplines.

Multi-purpose schools are thus intended to serve a three-fold purpose. They will provide diversified courses to pupils with

different aptitudes and interests. They will also help to provide trained and efficient personnel for the agricultural, industrial and technological programmes of the nation. More important still, they will help to bring about a change in the social outlook in which dignity of labour will receive adequate recognition.

Multi-purpose schools are expected to make secondary education significant and creative for pupils with diverse tastes and aptitudes. Another necessary measure to achieve the same purpose is to extend the provision of co-curricular activities in the school. Such co-curricular activities have a direct bearing on education as they offer creative outlets to the surplus energy of young pupils. They are also instruments for training young persons in special skills and crafts. It is well known that a person will in pursuit of his hobbies undergo hardship of a type which he would never stand in his normal avocations. Co-curricular activities also provide excellent opportunities for developing qualities of character and leadership. They thus have a many-sided impact on the discipline of schools. Problems of discipline arise only when the pupils find no interest in their work and are not fully occupied. Various types of co-curricular activities will keep them busy, offer them channels of creative self-expression and at the same time contribute to the improvement of the school services.

The role of the multi-purpose school in bringing about a change in the outlook towards manual labour has already been mentioned. The inclusion of a craft as a compulsory subject in the curriculum is also intended to serve the same end. Emphasis on craft is intended to be a corrective to the general aversion to manual labour and develop in the pupils a new respect for its dignity. Training in a craft is valuable both for its educative implications as well as the contribution it can make in preparing a pupil for life. At the elementary stage, training in craft is intended primarily to develop and establish sensory skills in the child. The products of his labour have at this stage hardly any economic value, but the work of secondary school pupils should be able to meet many of their own needs and also be generally socially acceptable.

The inclusion of a craft in the secondary school curriculum will thus serve a double purpose. It will help the pupil to develop his personality. It will also increase his self-confidence as he may, if the need arise, be able to earn his livelihood by the practice of the craft he has learnt.

Among other important recommendations of the Commission are those for the improvement of school libraries, the use of audio-visual aids, the reform of examinations and the adoption of the activity method on a far larger scale than has been the case till now. The library must be regarded as an essential instrument for the development of secondary education and be so organized as to encourage in pupils the habit of general reading. Audio-visual aids will make instruction more vivid and interesting and also develop the initiative of both teachers and pupils. Nor need such aids be confined to expensive material imported from abroad. Audio-visual methods have been used on a large scale in the traditional teaching of the countryside. All that need be done is to adapt them for use in the more formal instruction imparted in schools. As a step towards the radical reconstruction of the present type of examinations, the Commission has suggested that selected schools may be given the freedom to work out their own syllabuses and methods of teaching and examination. The introduction of co-curricular programmes will itself increase the quantum of school activities. In addition, pupils must be given a greater share in the actual class work by assigning them set tasks and allowing them to initiate programmes of study themselves. The use of pupils of higher classes to help in teaching in the lower classes will have a double benefit by improving the teacher-taught ratio and making the school work more interesting to all classes of pupils.

It is not possible to discuss in detail the various important recommendations made by the Lakshmanaswami Commission. Those who are interested will find sufficient material in the Commission's Report, but one other recommendation may in passing be specially mentioned. This is the one for the addition of one extra year to the course to round off secondary education and

mark it as a complete stage. This is intended to raise the standard of attainment at the end of the secondary stage. Since this is the stage which marks the completion of education for the large majority, it need hardly be stressed that no effort must be spared to make secondary education a definite stage with special characteristics of its own. The addition of one extra year will give the adolescents an opportunity of attaining greater physical, mental and emotional maturity. It will also add to their attainment so that secondary education may become a sufficient qualification for entry into various vocations.

V

It is obvious that the reconstruction of secondary education in India cannot be carried out overnight. With the best of intentions, it is not possible to provide immediately a better and more diversified type of secondary school. There are about 18,000 such schools in India of whom some 10,000 are high or higher secondary schools. Almost without exception they suffer from lack of accommodation, equipment and playing fields. Their teachers are ill-paid and often ill-equipped and untrained. The cost of raising them to the requisite standard is stupendous and perhaps beyond the present capacity of the country. Even if there were no financial considerations, sufficient teachers of the requisite quality are simply not available. Nor can they be recruited and trained except through a programme extending over many years.

Since all schools cannot be improved simultaneously, it is necessary to develop at least some schools of a better type in each State. In a community pledged to democracy and the equalization of opportunity for all, such a step can be justified only if access to better schools is based on merit alone. From the nature of the case a vast majority of the people in any country must end their formal schooling at the elementary stage. Even in countries like the U.S.A., the U.K., Japan or the U.S.S.R., universal free education is available only up to the age of 15 or so, while secondary education proper begins only at that stage. In India, the target laid down in the Constitution is to provide universal and free

education only up to the age of 14. Even that target has not yet been reached. Secondary education is therefore the prerogative of only a minority. In such a context, the attempt to provide a superior type of secondary schools can be justified only if they serve as pilot projects which will ultimately raise the quality of secondary education for the country as a whole.

The Government of India has recently recognized the need of taking a more direct interest in the improvement of selected schools. It has been decided that out of the 10,000 high schools in the country, at least 500 must be converted into multi-purpose schools by July 1956. This will mean additional teachers, buildings and equipment. New courses will be introduced and the libraries of such schools will be considerably improved. It is also proposed to up-grade another 1,500 high schools by providing them with better libraries and laboratories and introducing the teachings of science and other practical courses.

The establishment of post-Basic schools in different parts of the country is also intended to raise the tone of secondary education as a whole. Post-Basic schools are yet in an experimental stage, and are run by pioneers who are dedicated to an ideal. With their strong idealism the teachers in such schools can and often do create an atmosphere where education brings a new awakening to the pupils. As the number of post-Basic schools increases they will serve to correct the urban bias of secondary education and train up leaders for the majority who live in rural areas.

Another important decision is to maintain and develop a number of public schools in the country. As American writers have often pointed out the name is a misnomer. For it is a special type of private schools that are described as public schools. Generally founded by a private individual or organization these schools are invariably residential and draw their pupils from the more fortunate sections of the public. With greater resources and freedom, they lay great stress on the development of qualities of leadership and are able to provide greater facilities for their pupils. With these advantages, they may well serve as valuable centres of experiment in the field of secondary education.

The Government of India decided some time ago to maintain two public schools, one in north and the other in south India. There was at that time considerable criticism from a section of even the informed public. The critics said that the objective of the Constitution is to create a classless society. Special support for schools of this type was, they held, against the spirit of the Constitution as children in such schools would receive a start in the race of life. The Government did not agree with the critics and held that since the standard of all secondary schools cannot be immediately raised, at least some centres for a better type of secondary education must be maintained. Their existence would serve as a challenge to the more orthodox schools and thus indirectly help to raise standards.

In order, however, to meet the valid objection that better facilities can be justified only on the ground of higher aptitude, it was felt that entrance to such schools should be governed by considerations of ability of the child rather than the financial status of the parent. There can be no question that this is an unexceptionable principle. All public schools in India must aim at creating conditions where greater facilities are offered to children with higher abilities. There are no doubt some practical difficulties in giving full and immediate effect to such a principle. Apart from financial obstacles, there are difficulties in judging the ability of young children, particularly in border-line cases. Nevertheless some method must be devised by which at least the best may be found a place and the manifestly unfit rejected. The institution of a number of merit scholarships in public schools is intended to ensure that able children are not denied the opportunity of studying in them only because of lack of means.

One criticism against the public school is that it is more expensive than an ordinary school. It is also said that the public school tends to create a new class of socially privileged groups. In an economically under-developed country, the higher cost of a public school can be justified only if it is established that its contribution to the development of character and leadership is markedly superior to that of the ordinary school. Steps must however be

taken to ensure that public schools do not create a privileged class. No one can object to a competition in excellence but there would be legitimate ground for complaint if public schools are merely the nursing grounds of the scions of wealthy families.

The higher cost of a public school is perhaps inescapable. The ordinary secondary school in India is in any case very short of what a secondary school ought to be. A place where young people spend their most impressionable years should not be narrow, restricted and overcrowded. It should offer them not only formal instruction but the opportunity to practise the art of co-operative and creative living. This means that there must be facilities for extra-curricular activities which are in some respects even more important than the purely academic side of school life. Games, sports, dramatics, debating societies and other social activities train young persons in the art of citizenship. Such services mean larger accommodation and better and more numerous staff. Improvement would therefore lead to a rise in costs of even ordinary schools.

Public schools are bound to cost still more for one essential feature of such schools is that they are largely residential. This feature allows the public school to develop all ancillary services on a much larger scale than is possible in a day school. In addition it enables the children to come into much closer contact with their teachers. Education is not a matter of mere imparting of information but a living contact between the mind of the teacher and the taught. Residence is perhaps the decisive factor which makes education in a public school superior to education in the ordinary type of secondary school but that is also the reason why the public school is and must be more expensive than the ordinary secondary school.

India has realized the importance of residence as an educative principle from the earliest times. In the old Indian system pupils went to live with the teacher. Is this not an early form of what has now developed into the residential school? In course of time the system was discontinued but some of its values were maintained by the personal relations of teacher and the taught. Till recently

the number of secondary schools was small and more important, the size of each school was limited. A majority of them were in small towns where the children came into constant contact with their teachers. Practically every child in the school was known personally to practically every teacher of the school. Even in the larger towns—they were neither so many nor so large as they are today—the size of the school made it possible for each teacher to know each child. Today all this has changed. The number of schools has increased enormously. Still more marked has been the increase in the size of the school and the tendency for schools to be concentrated in the larger towns. The secondary school today is often nothing better than a teaching shop where there is hardly any personal contact between the teacher and the taught.

A thorough reorganization of secondary education is thus inescapable, but with her existing resources, India cannot provide residential education to all her secondary pupils. A large proportion of schools must remain day schools but some of the attractive features of public schools can be introduced in them. The house system in a public school has obvious excellences. It ought to be possible to devise some adaptation of the system for the ordinary non-residential school. There are other features which are today found only in public schools and could with advantage be incorporated in ordinary day schools. Public schools could thus serve as pilot institutions where interesting innovations could first be tried out in more favourable circumstances.

The future of public schools in India would be assured if they served this important educational need, and if in addition, the following factors are given due consideration:

- (1) A school is, and ought to be, a reflection of the life of the community. The public school in India must, therefore, be brought nearer to the pattern of Indian life. This will mean changes in both the form and the content of the public school. There must be considerable simplification of the standards and customs of school life. There must also be considerable reorientation of the courses to include the traditions and ideals which have become part of the Indian heritage.

(2) The public schools must also steadily draw closer to the general educational system of the country without losing their special merits. Each public school now tends to develop as an independent domain. While the autonomy of the school has great value and must be preserved, it is necessary to devise measures to ensure greater contacts with one another and with the general educational system of the country.

(3) Steps must be taken to bring down the cost of public schools while maintaining their special features and quality. They will remain more expensive than ordinary schools but every effort must be made to reduce the disparity. Simplification will lead to some economy but other avenues for reducing the gap between the expenditure and income must be explored. This gap cannot be bridged by an increase in school fees, for already the fees are so high as to make public schools inaccessible to the majority of the people. There may be some subsidy from public funds but public schools may also consider the experience of Basic schools where part of the school budget is sought to be met by the income drawn from the craft work of the pupils. Public schools are perhaps in a better position to benefit by the application of this principle. They include a good deal of activity in their normal programme and with small adjustments much of the activity can be diverted to socially useful channels. Besides, pupils in public schools are older than those in a Basic school. Craft work for the younger children in a Basic school must be primarily a play activity but in a public school such work may and ought to give some economic return.

(4) All schools generally, and public schools in particular, must be visible symbols of the principle that the role of education is the equalization of opportunity within the community. It is said that the children are the greatest assets of a nation. Care must be taken to see that these assets are used to the best advantage of the community. This will require that facilities be offered to each child according to its need and services expected from it according to its capacity. In no other way can an optimum use of our human material be made. Even such a step would not lead to absolute

equality nor can it be a function of the State to achieve equality in such sense. There must be difference in aptitude, taste and ability between different individuals. It is however the function of the State to ensure the equalization of opportunity and thus create within the community a sense of democratic solidarity and well being.

VI

The shortage of teachers of quality and the lack of funds make it the more necessary to plan carefully the reconstruction of Indian secondary education. The Central Advisory Board of Education after considering this problem for several years, passed the following resolution in January 1955:

'The Board after very careful consideration of the stage of termination of secondary education and the qualifications necessary for entry into universities has arrived at the following unanimous conclusions:

- (a) The first degree course should be of three years and 17-plus should be the minimum age for entry into universities.
- (b) The end of secondary education at 17-plus should mark a terminal stage in education and prepare students for life. It should also be of a standard which would enable them to participate with profit in the three years' degree course.
- (c) The Government of India be requested to appoint a Committee to draw up an integrated syllabus for the School Final Examination to achieve the above objective.
- (d) The last class of the secondary stage should be called the Eleventh Class and may be reached *after* schooling of not less than ten years, the actual duration of the school system in the various States to be determined by the State Governments concerned.'

A resolution in almost identical terms had been passed earlier by a Conference of Vice-Chancellors and Chairmen of Boards of Secondary Education held at New Delhi. Later, it was endorsed by the Inter-University Board unanimously at its session held in Patna towards the end of January. There is thus agreement, per-

haps for the first time in almost forty years, on the general pattern of secondary education and the structure of the first degree course among all the authorities concerned

It will be noticed that the pattern which has finally found acceptance with State Governments, Universities and Boards of Secondary Education is slightly different from the pattern recommended either by the Radhakrishnan Commission on university education or the Lakshmanaswami Commission on secondary education. The Radhakrishnan Commission recommended a three-year degree course after the present Intermediate examination. The Lakshmanaswami Commission recommended the abolition of the Intermediate examination but provided for a four-year secondary course before the three-year degree.

The Radhakrishnan Commission's recommendation about retaining the Intermediate as the condition of entry to a degree course had to be modified as the arguments against two public examinations within a period of only two years were accepted as convincing by the Central Advisory Board. It is common experience that at least two or three months before a public examination, pupils lose all interest in regular class work and concentrate all their time and energy on preparing for the examination. In many institutions, classes are suspended for the period to enable the pupils to prepare better. Again, after the examination is over, the pupils wait for three to four months for the results. At least another month is wasted in securing fresh admission and settling down to work. Each public examination thus means the loss of six to seven working months. Besides, the strain of a public examination tells upon the pupils, so that they are unable to undertake any serious work during the period of enforced rest when they are waiting for the result. A final and perhaps decisive argument was that the Intermediate marked no definite stage in education and was therefore redundant and wasteful from the national point of view.

The recommendation of the Lakshmanaswami Commission about a four-year secondary course was modified in view of the provision in the Indian Constitution that compulsory education

must be provided to all children up to the end of the fourteenth year. This meant that a four-year integrated course at the secondary stage would raise the school-leaving age to eighteen and make 21 the earliest age at which a student could secure the first degree. The Lakshmanaswami Commission itself has recorded that parents and teachers alike were opposed to extending the period of tutelage in school beyond 17 or 17-plus. When representatives of the State Governments were asked this question during discussions in the Central Advisory Board, not one State was prepared to raise the school-leaving age to 18. In fact, all the States said that even 17 or 17-plus would place a great strain on their financial and other resources.

The Lakshmanaswami Commission had given no clear lead on the question of the duration of schooling before the end of the secondary stage. On the one hand, it suggested that there should be four years of schooling after a eight years' elementary course, making the duration of pre-university education one of twelve years. On the other, it recommended that in States where at present the school-leaving certificate is taken at the end of ten years of schooling, the course should be prolonged by one year, thus making the duration of pre-university education one of eleven years. The Commission had been led to make these ambiguous recommendations because of differences in the structure of school education in different States. Some had a primary course of four years and others of five. In some States the middle stage was three, in others four or five. The secondary course proper also differed from State to State.

It was obviously impossible to achieve uniformity or even establish equivalence so long as these divergencies existed. The only way out, therefore, seemed to be to decide what should be the proper age for termination of secondary education and determine the standard which a pupil ought to attain at that age. It is true that in many European countries, eighteen is the terminal age for secondary education but for reasons already indicated, it was not possible to extend secondary education in India up to 18. Besides, Indians have a shorter expectancy of life and perhaps

mature a little earlier than Europeans. It would not be improper to regard 17 or 17-plus as marking the end of adolescence here and fix it as the terminal point of secondary education. In all States without exception, this would mean the retention of pupils in secondary schools for a longer period than is customary now.

There are some who on financial grounds oppose such extension but it is inescapable if secondary education is to serve its purpose. If secondary education is to become a terminal point in education and not merely a preparatory stage for entering into universities, it should be such that the bulk of boys and girls would at the end of this stage, be ready to take up gainful employment and play an effective role in a democratic society. The dual purpose of secondary education, namely to prepare the vast majority for life and a small minority for higher education cannot be fulfilled unless secondary education is extended up to at least 17-plus.

An objection from a contrary point of view was at first raised in States where there is a eleven years' school course. It was said that in such States there will be no extension in the period of schooling. Since the pupils in these States have to study in the Intermediate classes before they are in a position to join the university, the elimination of the Intermediate, it was argued, would lead to a lowering rather than a raising of standards. This objection also is based on a misunderstanding. The Central Advisory Board of Education has purposely placed greater stress on the age at which secondary education is to end than the years of schooling which precede it. Even in States which today have eleven years schooling before matriculation, the examination is taken by most pupils at 15 or 16. It is quite obvious that other conditions being the same, the standard of attainment of pupils will be higher at 17 plus than at 15 or 16. Further, by eliminating one public examination, the working period in schools is increased by at least six months. A more intelligent planning of the school curriculum and the introduction of the mother tongue as the medium of instruction will also help effectively in raising the general standard of instruction and attainment in school subjects. These reforms backed by the raising of the minimum school

leaving age will thus ensure that pupils will be physically, intellectually and emotionally better fitted for collegiate education.

In fact, the deviation from the recommendation of the Radhakrishnan Commission regarding the need of an Intermediate stage or that of the Lakshmanaswami Commission regarding the duration of the secondary course proper is more apparent than real. The Radhakrishnan Commission recommended the retention of the Intermediate examination as it was satisfied that any standard lower than the present Intermediate would be inadequate preparation for entering the university. The recommendation of the Central Advisory Board has kept the age of entry to the university at the same level as the end of the present intermediate, but because of the better organization of the syllabus and improvement in methods of teaching aims at reaching a somewhat higher standard within the same period of time. Here it may be mentioned that the standard of attainment of most boys and girls who seek to enter the university in the United Kingdom or Europe is at the age of seventeen considerably higher than the standard of our intermediate examination. There is no reason to think that our pupils are less intelligent than pupils in European countries. It may therefore be confidently expected that with better organization of the syllabus and better teaching, our young men and women will attain the same standard at 17-plus as is now reached by pupils of the same age in Western countries.

The Lakshmanaswami Commission has no doubt suggested that there should be a higher secondary stage of four years after elementary education, but of these four years the first year will be exploratory and aim at finding out the pupil's aptitude and interest. There is no reason why this exploration should not begin in the last year or even earlier of the eight-year elementary course. I for one would allow a great deal of flexibility in this manner and permit pupils to change from one course to another at any stage during school life. For the majority, this diversion will take place at the age of 13 or 14, so that the majority of pupils who go in for secondary education will receive at least four or five years' schooling in that stage. It will be only a small minority that will be

selected for the secondary course either earlier or at a later age.

The Advisory Board has for the reasons detailed above fixed the terminal point for secondary education at 17-plus and recommended that the pre-university class in all States should be called Class Eleven. It has however left the actual duration of the school system in the various States to be determined by the State Governments concerned. If for any reason a State wishes to retain eleven years of schooling *before* Class Eleven it can do so by starting formal schooling at the age of five, but the terminal age and the standard of attainment at that stage will be the same for all. Such an arrangement is necessary at least during the transitional period as it will cause as little dislocation as possible to the different systems which at present exist in the States. In order however to ensure that the standard aimed at this pre-university class is uniform throughout the country, the Board has recommended that an integrated syllabus for the School Final Examination should be drawn up by a Central Committee and applied to all States. Since there is no reason to think that boys and girls differ in intrinsic ability in different parts of the country, the fixation of the same age as the terminal point of secondary education is expected to ensure that the attainment will also be similar throughout the country.

The reconstruction of secondary education in India is a colossal task. Though it is essentially a State responsibility, the Government of India has recognized the need of taking a more direct interest in its achievement. Mention has already been made of the decision to improve some 2 000 existing schools. Even when all of them become higher secondary schools the majority of the existing schools would still remain ordinary high schools. During the transitional period it is thus inevitable that two types of secondary schools will exist side by side. The pupils of the higher secondary schools will be able to go straight to the first year of the three-year degree course. The pupils in the existing type of high school will require an additional year to prepare them for entry into universities. As a measure which is likely to cause the least dislocation, it has been suggested that this pre-university class may be

retained in colleges which at present have a two years' Intermediate followed by a two-year degree course. All that would be necessary would be to rearrange the organization to one-plus-three in place of two-plus-two. Even universities which have a three-year degree course may find it easier to add this pre-university class to a college than to a school.

There is however another school of thought which would like this additional year to be organized in the schools themselves, mainly on the ground that the instruction given during this year should follow the methods of school teaching. In a university, a teacher can lecture to a class of a hundred or more. The students are expected to select for themselves what they consider relevant or important in the teacher's discourse. In a school system of teaching the teacher is expected to give individual attention and guidance to the pupils in his charge. This is one main reason why school classes consist of 30 or 40 pupils while college classes are often two or three times that number. Another argument in favour of having this pre-university class in the school is that as the highest class in the secondary stage, it will receive a degree of attention which it can never secure in a college. Besides, the organization of this class in the school will provide the pupils with larger opportunities of developing qualities of leadership than would be possible otherwise. This is however a matter which can be left to the State Governments to decide in consultation with the university concerned after taking into account the facilities available in the schools and colleges.

VII

Important as is the role of the teacher in all stages of education, there are certain special features in secondary education which make it even more crucial at that stage. Teachers in elementary schools carry a heavy responsibility as they determine the development of the young placed in their charge. Children are, however, on the whole, docile and truthful. In any case, they are more easily amenable to the discipline the teacher imposes on them.

At the other extreme, students in universities and institutions of higher learning are increasingly independent of the teacher. They pursue their studies by themselves and look to the teacher only for general guidance and direction. Besides they are comparatively mature and do not need the constant attention of their teachers. Pupils in the secondary stage lack the docility and dependence of young children but have not yet developed the maturity and independence of college students. They have the adolescents' distrust of existing values and are in a mood of permanent rebelliousness and unrest. They have also all the impatient idealism of youth and seek to rebuild the world nearer their heart's desire. Their teachers are either their heroes or tyrants whose authority must be defied at any cost. At no stage of education is it therefore so necessary that the teachers must have wisdom and patience and a firm faith which will enable them to give proper guidance to the youth placed in their charge.

The headmaster has a decisive role to play in such an endeavour. The quality and atmosphere of a school depends largely on his personality and interest. With an alert, efficient and sympathetic head the tone of the whole school improves. Without support from a good headmaster even energetic and well-trained teachers with the best intentions cannot do much. Many headmasters start their careers with excellent ideas but due to uncongenial environment and the pressure of routine they tend to lose their early enthusiasm and are in quite a large number of cases content to carry on the work of the school in a routine way.

Apart from an uncongenial social background all teachers and the headmaster is no exception are liable to suffer from the monotony which attends much of class teaching. In universities this is partly mitigated by the constant incentive to extend the boundaries of knowledge. Schools offer no such relief. They generally content themselves with imparting what knowledge has already become a part of the community's heritage. The novelty of the teacher's work soon wears off and a routine of dead monotony sets in. Once a teacher loses interest in his work how can he evoke and hold the interest of his pupils? The teacher must

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At the other extreme, students in universities and institutions of higher learning are increasingly independent of the teacher. They pursue their studies by themselves and look to the teacher only for general guidance and direction. Besides, they are comparatively mature and do not need the constant attention of their teachers. Pupils in the secondary stage lack the docility and dependence of young children but have not yet developed the maturity and independence of college students. They have the adolescents' distrust of existing values and are in a mood of permanent rebelliousness and unrest. They have also all the impatient idealism of youth and seek to rebuild the world nearer their heart's desire. Their teachers are either their heroes or tyrants whose authority must be defied at any cost. At no stage of education is it therefore so necessary that the teachers must have wisdom and patience and a firm faith which will enable them to give proper guidance to the youth placed in their charge.

The headmaster has a decisive role to play in such an endeavour. The quality and atmosphere of a school depends largely on his personality and interest. With an alert, efficient and sympathetic head the tone of the whole school improves. Without support from a good headmaster, even energetic and well-trained teachers with the best intentions cannot do much. Many headmasters start their careers with excellent ideas, but due to uncongenial environment and the pressure of routine, they tend to lose their early enthusiasm and are in quite a large number of cases content to carry on the work of the school in a routine way.

Apart from an uncongenial social background, all teachers and the headmaster is no exception, are liable to suffer from the monotony which attends much of class teaching. In universities, this is partly mitigated by the constant incentive to extend the boundaries of knowledge. Schools offer no such relief. They generally content themselves with imparting what knowledge has already become a part of the community's heritage. The novelty of the teacher's work soon wears off and a routine of dead monotony sets in. Once a teacher loses interest in his work, how can he evoke and hold the interest of his pupils? The teacher must,

therefore, be helped to overcome the monotony of the daily routine and gain fresh experiences that will add to the quality of his work.

An attempt has recently been made in India to deal with this problem. Their number—there are about 200,000 teachers in secondary schools—made it impossible to organize adequate facilities for all teachers but it was felt that a beginning should be made with the headmasters. In 1953, a Seminar-cum-Summer Camp was held in Simla, formerly the summer capital of India, to give the headmasters from different States an opportunity of comparing notes, exchanging and sharing experiences and discussing various matters of common interest. It also afforded them a break from their everyday routine. The financial resources of teachers rule out any large-scale travelling. Not many headmasters move out of their States and the idea of a holiday in the hills is for the majority an impossible dream. The offer of such an opportunity would, it was hoped, serve to stimulate their interest and enthusiasm. The close association of headmasters from widely scattered States would also help to develop in them a truly national outlook. The Seminar-cum-Camp could thus contribute to the growth of greater uniformity of educational ideas and practices throughout the country.

There were other reasons which favoured the holding of this Seminar-cum-Camp. In spite of the various handicaps from which they suffer, there are headmasters in all parts of the country who have done good work. Unfortunately, this is not often known beyond their immediate environment. Bringing them together would help to enrich the experience of the participants, and make it possible to diffuse throughout the country some of the most significant methods and ideas developed in different regions. The State Governments were requested to depute to this Seminar-cum-Camp some of their best headmasters. Selection by their respective States was a recognition of their special competence and was intended to encourage other headmasters to make special efforts for improving their schools.

The success of the experiment was so great that it was de-

cided to make such Seminar-cum-Camps a regular item in the programme of reconstruction of secondary education. Ten inter-State camps on a regional basis were accordingly held during 1954 and ten more have been planned for 1955. State Governments have also started to organize similar Seminar-cum-Camps. It is hoped that within the next five years, three to four thousand headmasters will have the opportunity of participating in a Central or State Seminar-cum-Camp.

It was soon realized that valuable as such gatherings of headmasters are, the Directorate and the inspecting staff have to be brought into the picture to achieve full success. Headmasters can propose innovations and experiments but unless these are welcomed or at least tolerated by the Directorate, school managements very soon become nervous about their possible effects. In the very first Seminar-cum-Camp held at Simla, Directorates of different States were invited to come and participate for part of the time. In the regional Seminars in 1954 and 1955, more definite representation has been given to the inspectorate. State Seminars are also making provision for the attendance of members of the inspecting staff. In addition, almost all these Seminar-Camps were able to attract Education Ministers, Vice-Chancellors and other important members of the educational world. They have not stayed long but their participation for even a day has often been an encouragement to the headmasters and an education to the visitors.

A beginning has now been made with similar seminars for principals of Training Colleges. For reasons already mentioned it has so far been impossible to arrange such camps for all teachers of secondary schools. An attempt is however being made to organize weekend discussion groups for teachers of the same subject from the same school district. In a country so large as India and with so many State Governments even this is bound to take time and cannot prove fully satisfactory. That is why attention is now being concentrated on training colleges. It is felt that if Principals of such colleges participate in the Headmasters' Camps and hold special ones of their own, it would lead to a transformation of

the atmosphere in training colleges by making them more sensitive to the difficulties which the headmaster of a secondary school has to face.

Another proposal intended to improve the effectiveness of training colleges deserves special mention. It is proposed to introduce a new type of Extension Service in a number of selected training colleges. These colleges will have a special relationship to a number of high schools in their respective areas. This will have, it is hoped, a two-fold effect on all training programmes. Till now, training colleges have been places where individuals—whether practising teachers or young candidates for the profession—have come to receive training. Under the new proposal, each selected college will go out to reach all high schools within the orbit of its operation. Thus, on the one hand, the training will extend not to individual teachers but to the entire schools, and on the other it will be a projection of the training college into the life of the school. Training colleges, by improving the quality of new recruits and giving a new outlook to teachers already in the profession, may thus help to start a silent revolution which will change our existing secondary schools beyond recognition.

February 1955.

THE CONCEPT OF SOCIAL EDUCATION

THAT the State must provide education for all citizens has been widely recognized only in comparatively recent times. Yet it is surprising that it should have taken so long to recognize this obligation. In physical prowess man is fairly low in the order of creation. His senses also are extremely weak. If he has yet triumphed over the rest of creation the secret lies in his capacity to enrich his own experience by drawing upon those of others in present and past generations. The simplest definition of education one can offer is that it is the process by which this broadening of the experience of the individual and the community has taken place since the days of primitive man.

Education in this sense has been a condition for human progress and in fact for human survival. That this was not more widely recognized in the past was due to the hierarchical structure of most earlier societies. In such societies—whether they are monarchical or aristocratic, priestly or oligarchic—there was a sharply defined hierarchy and decisions were taken by comparatively a few. It was therefore possible for society to function and even progress if education and the consequent broadening of experience did not reach all the people. Today the position is entirely different. The decisions still remain in the hands of a few, but these few derive their power and authority from the acquiescence, if not the willing consent, of the many. Not even the most powerful dictator can go fully and always against the will of the people. His decisions may for a little while or on certain specific issues prevail but the broad lines of his policy over long periods are and must be determined by the character and the temper of the people he claims to command.

Education for the people is therefore a desideratum in a country like India which has chosen democracy to be its way of life. Democracy can work only if all the people of the land have some knowledge of general issues while smaller groups of experts have more specialized and intensive knowledge according to their position in the hierarchy of leadership. Modern conditions have made the need for both general and specialized knowledge even more urgent. The advance of science has vastly expanded the horizons of our experience by converting the whole world into one family. Simultaneously, it has placed in man's hand instruments of destruction which can wipe out the human race. With the growing interlacing of relations between peoples all over the world, the decision to adopt a democratic way of life has imposed an immense responsibility on the Indian people. If Indian democracy is to be real, the people at large must have knowledge of India and the world.

We do not often associate a democracy with an hierarchy. Democracy does not and cannot however mean the rule of all but only the opportunity of rule by all. Even in a democracy, there must be a leader or group of leaders taking decisions at different levels of national life. In the old hierarchical forms of society, leadership was an accident of birth, status or wealth. In any case, it was confined to a comparatively small and restricted group. Today, leadership at all levels is open to all members of the community. It is an opportunity of leadership rather than actual leadership which has been brought within the reach of all in a democracy.

In a democracy, there must be widespread education permeating the life of the community. This demands provision for universal compulsory free education to the growing generations. It is not without significance that the concept of universal free education has grown with the extension of franchise among the people. Education for children has increasingly become a first call on a nation's resources. Children however take time to grow up and in the meantime events will not wait. In countries, where education is not widespread and which have adopted a demo-

cratic way of life, it is thus necessary to undertake special programmes to eradicate illiteracy among adults. In this way alone can the deficiencies created by the past lack of educational facilities be overcome.

There is another reason for placing a special emphasis on a programme of education for the adults. No programme of compulsory universal education for children can possibly succeed without the active support of adults. A State may pass a law making education compulsory but unless the people accept such laws no State can enforce them by military or police measures. It has also to be remembered that countries educationally backward will be economically backward. In such conditions, the smallest addition to the family income makes a difference and children begin to earn at an early age. The decision to send a child to school often involves a conscious sacrifice on the part of the family. A vast programme of education for the adults is necessary to make them realize the need for such sacrifice.

II

When India became free in 1947 hardly 15 per cent of the population was literate. If only the adults were counted—and they alone have the right of decision in a democracy—the percentage of literacy was still lower, perhaps not even 10 per cent. In other words, of the people who were to exercise sovereignty in a democratic republic, 90 per cent lacked the equipment for collecting information about conditions in their own country and outside. At the same time, it is a truism that such information is indispensable for taking decisions on the economic or the political plane. There is a saying that people get the Government they deserve. It is one of the miracles of history that, with 90 per cent of the people ignorant of world affairs, India has elected a Government which has been so sensitive to the demands of the modern world and so devoted to the promotion of world peace.

One reason for this is that in spite of the lack of literacy, there has been widespread popular education in the country carried mainly through word of mouth. People from abroad have often

been impressed—and Indians share the feeling when they think about it—by the spirit of culture and civilized conduct which even the illiterate Indian often displays. Illiteracy and culture at first sight seem incompatible. The paradox is however explained if we remember the long tradition of oral education that has obtained in India. Custom and folk lore, proverbs and fables, mythology and scripture have been passed from generation to generation by word of mouth and to some extent made up for the lack of teaching through the written word.

Such oral education was perhaps adequate in the past when the world was divided into a number of isolated societies. Because of difficulties of communication, each society lived as a more or less self-contained unit. Customs and conventions reinforced by traditional beliefs were able to deal with problems which arose in them. Today, when societies with different outlooks and backgrounds have been brought into close contact, and the world is becoming increasingly one, customs or traditional beliefs can no longer meet the challenge of the new situation. For one thing, the existence of a number of divergent customs and beliefs tends to weaken the hold of each on its adherents. For another, the beliefs or customs of one society, even if firmly held, cannot offer a solution to the problems posed by the clash between two such sets. In such a situation it is necessary to strengthen traditional beliefs by appeal to reason. Oral education must also increasingly give place to education through the written word. Memory which is the vehicle of oral education can no longer cope with the multiplicity and complexity of facts. Education which enabled primitive man to overcome the opposition of natural forces must today help him to overcome the problems created by the clash between different social forces and ideas. It must also increase human resilience to enable man to accept innovations from abroad so long as they contribute to human welfare.

Fortunately for India, the social climate has always been favourable to education. In ancient Indian tradition, the Brahmin who was essentially a teacher was placed at the head of the social hierarchy. During the Middle Ages comparable reverence was

paid to Muslim divines. The Brahmin no longer enjoyed his former pre-eminence but he was accorded greater honour than other sections of the community. In modern India, the general desire for education has, if anything, deepened. Even the illiterate among adults are hungry for education for their children and themselves. This considerably lightens the administrator's task. In fact the situation in India is that the people want education faster and on a larger scale than the State is able to provide.

With the growth of political consciousness and the achievement of power by the people, there has been a corresponding increase in the demand as well as the promotion of education at all levels and particularly in the sphere of adult education. Since 1937 on a more or less provincial and since 1948 on a nation-wide scale, a great effort is being made to eradicate illiteracy among adults. There is also growing recognition that the lack of education is one of the major causes of India's poverty. It is said that there is no country which is intrinsically rich or poor; it is what the people make of the available resources. A country like Japan which is not rich in natural resources is one of the most highly industrialized and prosperous countries of the world through the effort of her people. On the other hand, there are vast areas in tropical Asia and Africa which, in spite of immense natural wealth, are miserable and poor. The Indian people have now recognized the need of widespread education as a condition of economic prosperity and political progress.

A rapid survey of the successes and failures of adult education movements since 1937 is both interesting and instructive. Provincial autonomy and the expansion of the franchise in rural areas gave a great and immediate impetus to the education of adults. The impulse did not however continue long. This was partly because of the outbreak of World War II in 1939, but more because the conception of adult education was inadequate. The emphasis was on literacy alone and sufficient attention was not paid to the difference in interest between the adult and the child. The result was that the adults soon became bored with the type of children's books that they were required to read. As a reaction,

there grew a tendency to minimize the importance of literacy. Some programmes were framed which sought to educate the adult without the mediation of reading and writing. From the nature of the case, such experiments could have only limited success. Education without literacy may have served in the simpler days of the past, but in the complex situation of the present, literacy has become an essential ingredient of education.

A little reflection makes it clear that programmes of adult literacy face several special problems. Those who began their essay in literacy in childhood are often unable to realize the special difficulties which face the adult learner. The child has an almost photographic memory. His fund of experience is limited but his curiosity is infinite. Learning to read is therefore for him an adventure and excitement. The adult has already achieved a body of knowledge and experience which normally suffice for most of his needs. He thus has no immediate incentive to acquire literacy. In fact, in many cases, he has to overcome the inertia of habit and an inner opposition to learn to read.

The practice of teaching literacy has also been geared to the needs of the child. He learns the alphabet through pictures and/or rhymes. The rhythm and the rhyme are often adequate compensation for the effort to learn. Stories of adventure whet his appetite for more experience. Not so with the adult. Various devices have therefore been adopted to overcome his difficulties. One is to choose words which are the names of objects resembling the shape of the letter with which the word begins. Others have sought to start with words if not sentences as they felt that the attention of the adult could not be held if he was asked to learn single letters. All these methods have been followed with varying success but available experience does not justify the grant of premium to any particular technique. In fact, it is the enthusiasm and understanding of the teacher that has generally been the decisive factor for success.

Connected with the problem of learning letters is that of providing suitable textbooks for the adult. It is obvious that children's books will not do. The adult may be illiterate but his is a mature

mind. He also has a far wider range of interest and vocabulary. His books therefore have to be adult in content but the words used must employ as simple letters as possible. Here again various methods have been used. In most Indian alphabets, there are conjunct consonants which are a terror to the young learner and still more so to the adult neoliterate. Some of the textbooks avoid the use of all compound letters. This gives them far greater flexibility as subjects suitable to adult interest can be included. Another method which has been followed with considerable success is to use books of general knowledge or history as textbooks for adults. The advantage of this method has been that the adult gets material suited to his maturer mind and acquires information and knowledge simultaneously with skill in reading.

In a sense even more important than textbooks for adults is the provision of suitable literature for their after-reading. Children lapse into illiteracy unless they keep up the reading habit. In the case of adults such lapse into illiteracy is even quicker. The production of literature for the adult must therefore have a high priority. It is necessary to ensure that such literature is of high quality. The State cannot of course produce literature but it can help in creating conditions in which healthy and wholesome literature may find as wide a market as possible.

As a result of experience and further thought on the subject, a new conception of education for the adult has gradually emerged. It recognizes that the adult's various interests must be catered for if an adult education programme is to succeed. It is embodied in a five-pointed programme which seeks as far as possible to meet all the needs of the adult. The five items in the programme are intended to provide firstly literacy, secondly knowledge of the rules of health, thirdly training for the improvement of the adult's economic status, fourthly a sense of citizenship with an adequate consciousness of rights and duties and fifthly healthy forms of recreation suited to the needs of the community and the individual. All the devices that modern science can lend are sought to be utilized to achieve these ends. Since the object of this programme is to make the individual a better member of the

community and simultaneously raise the standard of life for society as a whole, it is described as *social education* to distinguish it from the older programmes of mere literacy.

Social education may thus be defined as a course of study directed towards the production of consciousness of citizenship among the people and the promotion of social solidarity among them. It is not content with the introduction of literacy among the grown-up illiterates but aims at the production of an educated mind among the masses. As a natural corollary, it seeks to inculcate in them a lively sense of rights and duties of citizenship both as individuals and as members of the community.

III

Free India had to overcome the handicap of widespread adult illiteracy. She had also to create among large sections of her people the urge to better life. There is no denying that till very recently our villages were moribund. The peasant—and he constitutes the vast majority of the Indian people—lived without present satisfaction or future hope. In many cases he was not even conscious that his present condition could be improved. The age-old Indian belief in destiny and the law of *karma* has reconciled him to conditions which were at times intolerable.

With the increase of political power of the people, a new awakening began in the villages. The extension of the franchise to rural areas brought into the village people who had formerly confined their activities to towns. When the poor and illiterate peasant found that the so-called great in society came as a suppliant to his doors, he started to develop a new sense of dignity. It is, of course, true that he was not at first always conscious of the implications of his vote. In some cases he even regarded it as a saleable commodity and exchanged it for the highest price. He is becoming increasingly aware that the exercise of the franchise is not only a privilege but also an obligation. After 1947, and especially in the last three years, there has been an immense awakening of public consciousness among all sections of the

people. The new concept of social education formulated in 1948 was an anticipation of this development.

One of the major planks in this new concept of social education is the development of the sense of citizenship. This necessarily involves some knowledge of the history and geography of the country and of the social conditions obtaining there. It also implies acquaintance with the working of the State and particularly of the meaning and value of the vote. The early attitude towards the vote as a saleable commodity has to be replaced by a new consciousness that it is an obligation and the symbol of one's citizenship. In a democratic society, citizenship means participating in the sovereignty of the people. The vote is therefore evidence of the individual's share in sovereign power.

It is obvious that such instruction in social and political obligation must begin with the working of local self government. That is why in all programmes of social education a great deal of emphasis has been placed on making the citizen conscious of his rights and duties not only as a member of the State but also as a member of the many smaller communities in which the State is organized. Since 1952, there has been a great development of what are described as *Community Development Projects* and *National Extension Services*. The Community Development programme is an attempt to develop a compact rural area by providing many of the services which till now have been available only in towns. The National Extension programme seeks to provide similar services on a less elaborate scale and may be regarded as a first step towards the development of the area into a Community Project. While Central assistance and guidance are available for these projects, their essence is the evocation of local participation. This develops in the people of the area the powers of leadership and initiative. It is proposed to link up all programmes of social education with these National Extension Services so that education in citizenship becomes real and concrete to the average citizen.

National Extension Services imply a total effort for raising the standard of life of the people in all directions. This has also been the aim of social education since the acceptance of the new con-

ception in 1948. It therefore follows that programmes of social education include training in measures for economic improvement as well as instruction in the laws of personal and public health with special emphasis on clean and healthy living. The improvement of personal and public health requires greater resources on the part of the community. Social education therefore seeks to provide facilities for learning crafts which will enable the community to create the additional wealth necessary to sustain such effort. Since the vast majority of the Indian people depend on the land for their living, social education in villages is paying a great deal of attention to the improvement of agriculture. It is also seeking to provide fruitful outlets for the periods of enforced rest which is characteristic of Indian farming. In the absence of adequate rural credit, attempts have been made to increase the wealth of the community by bringing together unutilized labour and unfulfilled demands. In a word, social education is a powerful instrument for providing information to the average citizen for a fuller and freer life.

It may be added that the real aim of social education is to create an educated mind among the adult illiterate. This emphasis on education helps to indicate why mere literacy is not enough. We have in recent times had examples of peoples who are highly literate but whose education has been incomplete because of racial or class prejudice. Even today there are areas of the world with high literacy but with the culture of the people far short of what is desirable and possible. One manifestation of such lack of culture is to be found in the multiplication of sensational journalism, the production of cheap literature and the display of films which are often crude and vulgar.

The co-existence of literacy and lack of culture is essentially a modern phenomenon. It can arise only out of inadequate attention to the recreational needs of the community. The success of the Industrial Revolution was largely due to the principle of division of labour which led to an enormous increase in the production of goods. This encouraged extension of the principle to the affairs of life and led to a sharp differentiation of amusement from work.

Life does not however permit such divorce between its different manifestations. The more work became the concern of the community, the more was the individual thrown upon his own resources in respect of recreation and amusement. The experience of adult education programmes in India in 1937 proved that unless recreation was made an essential theme, the adult very soon tired of the effort at removing illiteracy. Recreation, as the name itself suggests, enables the individual so to use his leisure that he can face his allotted tasks with fresh and renewed energy. The problem of social education is thus closely linked up with the problem of leisure. In the past, leisure was the privilege of the few. They were trained how to use this privilege and were responsible for developing some of the finest products of human art. Today, leisure is potentially within the reach of all, but many do not know how to use it. An educated mind may be defined as one which can utilize its leisure creatively.

Programmes of social education seek to provide for the training of the emotions through art, literature, music, dance and other creative activities. Attempts are also being made for producing literature which will maintain the ancient Indian tradition of toleration, goodwill and limitation of wants while discarding some of the rigidity which developed in India in course of time. Through the establishment of autonomous academies in the fields of letters, dance, drama and music and of the visual arts, the State is seeking to enlarge the opportunities for creative self-expression by all types of artists. Special prizes have been instituted to draw the attention of artists to the need of creating literature for the neo-literate adult. Books for such awards are chosen not by any State authority but by bodies of literary men and critics whose recommendations are invariably accepted. It is also proposed to set up an autonomous National Book Trust which will publish or assist in the publication of cheap editions of the classics of India and other countries as well as original books on all subjects which are of interest to the citizens of a democracy.

The whole of India's history has been marked by the attempt at accommodation between different peoples, different outlooks and

different traditions. In the modern world such an attitude of accommodation is even more necessary because of the close contacts between peoples of diverse nations and countries. In all programmes of social education, a special emphasis is therefore placed on the principles of human brotherhood and a universal ethic. Very great stress is also placed on the necessity of toleration of differences in a democracy.

As indicated earlier, education of children cannot progress unless it is supported by the effort of the adults. On the other hand, social education cannot also make the necessary progress unless it is closely linked up with the normal educational activities of the community. It is therefore proposed that all social education programmes should be worked through the village school so that the schools may become the centres of community life. There is almost universal agreement that school-teachers should be the main instrument in making the masses conscious of this new urge.

IV

These broad ideals of social education have been accepted by all States. In the implementation of the programme, it was but natural that different States should place greater emphasis on different aspects. In a few States, the main emphasis is still on literacy. At the other extreme, there are one or two States, where social education is sought to be imparted through traditional oral methods. Attempts have also been made to use many modern audio-visual aids but even though the instruments are different, the principle is based on the experience of centuries. For reasons already indicated, education based on a purely oral tradition cannot suffice in the modern world. Experience is compelling all States to recognize increasingly the importance of literacy in their programmes of education.

One interesting development in this field is the evolution of the *Educational Caravan* in the Delhi State. These caravans are units of three or four jeeps with or without trailers. One unit serves as a mobile stage, the second has a small travelling library and the

third is an exhibition-van while the fourth carries a projector. The caravan goes to a centrally situated village and organizes a combined exhibition of health and hygiene as well as agricultural and industrial products. Physical feats and athletic contests for both children and adults help to rouse local interest. Dramas are also produced with the aid of local talent. They generally deal with some local problem and serve to stress the need of education for the villagers. After the educational caravan has—through its exhibits, discourses, demonstrations and contests—aroused local interest in the programme of social education, a squad of twenty to thirty teachers (both men and women) move into the area for a period of four to six weeks. They organize as large a number of social education classes as possible for both men and women. A breach in the citadel of illiteracy is thus made. When these squads move away, the local teachers take up the work and continue the programme. Certificates of literacy are generally given at the end of three to six months.

Delhi's target is to achieve literacy for 50 per cent of the adults of forty or below by 1957. Since the percentage was only about ten when the programme began in 1950, this target cannot be regarded as too low. In fact, the fulfilment of the target demands a greater effort than has been forthcoming till now. The local teachers are doing their best, but they are not enough to meet even the demand of the children who seek schooling. The target for social education can therefore be achieved only if there is a great increase in the number of workers in the field. This can take place only if students both in universities and in the senior classes of high schools come forward to take up social education work as a part of their own educational programme.

Special mention must also be made of the programme of social education in the Madhya Pradesh. Since 1948, the State Government has been carrying on a vigorous campaign for eradicating illiteracy and making the people conscious of their responsibilities in a democratic society. The syllabus is on the lines indicated above, but what is special in the Madhya Pradesh programme is the obligation placed on teachers to undertake adult education.

work. The State was one of the first in India to develop the idea of schools on wheels by utilizing multi-purpose social education cinema-vans. Community listening sets have also been used on a fairly extensive scale and rural libraries developed to sustain the interest and the education of neo-literate adults. It is significant that about 20 per cent. of those who have taken advantage of the State's programme of social education are women.

Mention may also be made of the efforts of States like Bihar and Rajasthan in developing social education in rural areas. In the past, groups of singers have gone into the villages to sing devotional songs and arouse religious feelings among the people. Bihar is using similar units for propagation of modern ideas. Rajasthan has experimented with the use of children for arousing interest in education among older villagers. In some respects, rural society in Rajasthan is more conservative than in most other parts of India. The village elder there has often looked at literacy programmes with indifference, if not opposition. Education of girls, let alone women, has also not found favour with the more conservative in Rajasthan. The State education authorities have sought to overcome adult indifference or opposition by producing problem plays by school pupils. Parents have come to watch their children perform. Since the plays stress the evils of illiteracy, the result has often been an encouraging change in their attitude towards social education.

V

The interest of women in programmes of social education is one of the most encouraging features in the picture. Bombay has in some respects taken the lead so far as social education among women is concerned. Even in a State like Rajasthan, which till recently has been under feudal rule, the initiative of women workers has yielded encouraging results. If women of leisure and means take up the work of social education among adult illiterate women, the results are bound to be striking. Once literacy and education spread among women, the problem of education of the

future generation becomes very much simpler. To teach a boy is to educate the boy but to teach a girl is to educate a family.

Two conditions seem necessary for the success of social education among women. The first is a right choice of the time for such classes. Generally, women are busy with their household work from early morning till late midday. They are again busy in the evenings. Besides, Indian women do most of their visiting in the early hours of the afternoon. Gossip is at least as popular as the midday siesta. Both convenience and tradition therefore rule out evening classes for women. Wherever social education classes for women have been organized in the afternoon, the response has been quite satisfactory.

The other condition is to make social education immediately practical. Most adult women are preoccupied with the demands of the family. The balancing of the budget is a constant anxiety. Social education must therefore hold the promise of economic gain if it is to attract women. Training in different cottage crafts and industries not only attracts women to social education centres but also enables them to contribute to the family budget. With the increase in the cost of living, many middle-class families have been compelled to reduce their standard of life. The same fate threatens the working-class family unless the women also become earning members. Anything which adds to the income of the family finds immediate acceptance. The addition may be direct in the form of more money. It may be indirect in the form of saving in the family budget for clothing and food. A woman welcomes training which enables her to make her and her children's clothes or prepare food or articles which would otherwise have to be purchased. In the case of widows, such training would enable them to earn their own livelihood.

Programmes of social education among women would help to mitigate the rigours of caste and other prejudices. One of the main reasons for India's weakness in the past has been the fissiparous tendencies due to caste community and provincial narrowness. Even today, one of the greatest risks to Indian solidarity arises from the operation of caste. The hold of caste has been

considerably weakened and untouchability has been made illegal, but it is still a major force in rural areas. Once caste is weakened among women, its days will be numbered.

A special effort must therefore be made to advance education among women, particularly in rural areas. It is however an unfortunate fact that for various reasons, this is the area where the least progress has been made. In recent years, there has been a great impetus to women's education throughout the country, but the rural areas are still largely unaffected by this movement. Since it is the rural areas where the greatest leeway has to be made up, there is a risk that accelerated progress in urban areas may further increase the existing gap between towns and villages. Continued illiteracy of a large section of the people not only slows down the rate of the country's progress but also produces an unbalanced social structure. The villages are as a whole not so advanced as the towns, and the difference is even greater in respect of the education of women and girls. This makes it the more necessary to examine the reasons for this difference and suggest measures to overcome them as quickly as possible.

Adult women are illiterate because they received no schooling when they were girls. One main reason for this is the lack of women teachers in rural areas. A large number of village schools are single-teacher schools, and in a vast majority of cases the teacher is a man. In the existing social conditions in rural areas, village parents are somewhat reluctant to send their girls to schools where the teachers as well as a majority of the pupils belong to the other sex. In addition, the teachers are often comparatively young men while village girls who attend school are on the whole somewhat older than the schoolgirls in towns. Besides, their closer contact with nature tends to make them somewhat more forward and mature. These considerations also weigh with the parents and add to their reluctance to send their girls to schools staffed exclusively by men.

The first step for accelerating the progress of women's education in rural areas must therefore be to create conditions in which village parents would be no longer reluctant to send their girls to

schools. One way of doing this which has been attempted at times, is to start separate girls' schools. Apart from educational reasons, the financial cost of such duplication would be so great as to render this an almost impracticable proposition. In fact, to insist on separate schools for girls would often mean the denial of educational opportunities to them.

The best solution would of course be to see that there is a fair proportion of women among the teachers in rural schools. Where it is a single teacher school, there are great advantages in insisting that the teacher should be a woman. It is generally admitted that women make better teachers for young children of both sexes. The lack of an adequate number of women teachers and various other social factors would however rule out, at least for the present, the possibility of single-teacher schools run by women in the villages.

If the number of children justifies the appointment of two teachers, the ideal solution would be to have a married couple in a two-teacher school. This ideal would however be difficult to fulfil. In the social strata from which a primary school-teacher is drawn, the wife of the teacher would only rarely have sufficient education to serve as a teacher. It would also be difficult to make provision for two-teacher schools with one of the teachers a woman unrelated to the other teacher. In view of these difficulties, special measures have to be devised as a first step towards the solution of the problem.

We cannot at present have husband and wife as teachers in a school, but there is nothing to prevent the wife of the school-teacher from serving as a sort of school mother. She would be in general charge of the girl pupils and thus create confidence both in the parents and in the girl pupils themselves. She could also be of some assistance to her husband in keeping the girls and young boys occupied and perhaps give them some training in sewing, laundry and gardening. Her very presence on the school premises would act as a necessary spur to draw more girls to the school.

The presence of a woman in the school would not only draw more girls to the school but also help in building up the nucleus of

a social education centre. The increase in the number of girl pupils would be perceptible only after a number of years, but an immediate benefit would be to provide an incentive to the adult illiterate women in the village to come to school. Once such a centre is established, it presents exciting possibilities. The centre would be a kind of women's club. Now-a-days the women's club is often the village well or the courtyard of some family. The main topic for discussion is local gossip. Once this centre is shifted to the more academic atmosphere of a school, it would start a process of education which may in the course of one generation revolutionize the countryside.

VI

One reason why progress of social education—and at least of literacy—has not been more rapid is a lack of appreciation of the effect of such education on the social economy. While the value of education is admitted by all, there is a tendency to regard it as an effect of rather than a cause for economic progress. It is not always realized that the wealth of a country cannot increase without widespread education. Yet it is a little surprising that this should be so. The application of science to the processes of industry marked the beginning of the Industrial Revolution. Its first result was the attempt to make machines do what had formerly been done by manual labour. This led to an enormous increase in the volume of production which in turn led to an expansion in the market. Since then, modern industry has depended more and more on the use of the machine. Invention, manufacture and use of new machines thus became one of the conditions of industrial progress. Equally important is the application of science for better utilization of whatever resources a country has. Science has reached a stage when almost anything can be made to perform almost any function. Modern chemistry can create food and drink out of coal and chalk, wool out of wood and all kinds of building material out of glass and plastic. It would not therefore be wrong to say that the development of industry in the modern world is a function of scientific knowledge.

It is not only the invention of new machines or the perfection of new processes of production that demands scientific and technical knowledge. With the expansion of the market, the processes of production and distribution of goods have become more and more complicated. Where formerly a producer had to consider only the requirements and tastes of his immediate environment, a producer in the modern world has to calculate the availability of supplies in many countries, the comparative costs of production at many stages, facilities of distribution over wide areas and the taste and capacity of people in many regions. Higher executives of modern industry must therefore possess highly developed skill and intelligence in addition to a wide knowledge of the world. Even the operatives if they are to be skilful and productive, must have some knowledge of the mechanism and the behaviour of the machines they handle. Modern forms of industry and commerce therefore demand a good general education for the people at large and highly developed knowledge and skill for the higher administrative and scientific personnel.

All progressive industrialists recognize that modern industry depends on education at every stage. It cannot however be said that they always translate into actual practice what they theoretically recognize. This is particularly true of India. Industrialists here have on the whole done much less for education than their counterparts in other countries. There are no doubt honourable exceptions but Indian industrialists as a class have not realized that investment in education will bring them rich returns. Industrialists complain and with some justification that Indian labour is less efficient than labour in the U.K. or the U.S.A. They do not seem to realize that the deficiency is due to lack of education. Few among them have therefore taken any steps to arrange for the education or training of their operatives.

Business magnates and industrialists in other progressive countries of the world have realized that illiterate workers cannot be expected to get full value out of complicated machines. Their experience shows how much private enterprise can do to eradicate illiteracy in a country. National newspapers in some countries

have proved that courses in literacy for adult illiterates can be organized with striking effect. Two daily papers in Porto Rico carried continuously for six months from two columns to half a page of lessons in literacy for adults. Some newspapers in South America distributed books for adult education either free or at nominal prices. This they could do as the production of the books cost them almost nothing. They had their own printing machines which were worked to full capacity only during certain specified hours. They had large stocks of waste paper rejected by the rotaries but usable for printing books. Nor did these newspapers lose financially. Such expenditure was a real investment. With the increase in the number of literates, their circulation invariably went up and they were able to charge higher rates for advertisement. Indian newspapers have a limited circulation because of lack of readers. If some enterprising paper started a scheme on the lines of the Porto Rican experiment, it would render a great national service with great benefit to itself.

Another example of business helping the cause of education and at the same time increasing its own profits is supplied by the insurance companies of the United States. They have rendered great service to the cause of health education by producing simple textbooks and manuals on diet and exercise. These books do not carry any propaganda in the text, but the name of the company is printed on the cover of the book. The books are given free to whoever applies. By increasing knowledge about health matters, such books tend to improve the longevity of the insured. The companies thus gain immediately in reduced payments on claims. Besides, such pamphlets are first-class media for propaganda. The name of the company is brought to the notice of thousands who may otherwise never have heard of it. The company also earns the goodwill of all who benefit by the advice contained in the pamphlets. If such services are appreciated in a country like the United States it is obvious that any effort in this direction by insurance companies would earn even greater appreciation in India where the average expectation of life is about thirty and the provision of health services by the State patently inadequate.

The cause of adult education can be and has been helped also by the small-tools manufacturing concerns of the United States. They have produced pamphlets which contain useful information on agriculture and the use of simple machinery. Some of these pamphlets may have a propaganda bias. After describing the agricultural or industrial processes, they often go on to suggest that a certain type of tool or implement would be necessary for the attainment of the best results. *Indian firms* also produce machinery of different types. They also spend large sums on advertisement, but few, if any of them, have realized that even from the point of view of business returns, such pamphlets on agriculture or matters of general welfare would be a sound investment. Such pamphlets would bring their products to the notice of a large clientele and earn their goodwill. While serving the cause of social education, the companies would thus expand their field of operation and increase their profits. Diversion of a portion of their publicity budgets to such purposes would thus be not only good business but also a distinct national service.

A more direct contribution to the cause of education can be made by the larger industrial employers. There are at present some five million industrial employees in India. A vast majority of them are still illiterate. If industrial firms undertook to educate their own operatives, they would not only be helping themselves by increasing the efficiency of their workers, but would also serve the country by the spread of information and knowledge. The factory worker is generally more energetic, intelligent and conscious than the rural worker. He would, therefore, respond more quickly to such education. Moreover, the benefit would not remain confined to the towns. India has not yet developed a separate proletariat and the factory workers go back to their villages periodically if not seasonally. Education of the factory worker would thus lead to a spread of education in the villages and help in breaking the inertia of rural areas. Government on its part can encourage such efforts of industrialists by treating approved expenditure on education of their employees as establishment expenses for purposes of Income Tax.

These are only a few suggestions as to how industry and trade can help the cause of education and in doing so help themselves. Educated workers would make for increased production and thus make for increased prosperity for both industry and trade. Education would also add to the national wealth by effecting savings in many directions. To take only one example: better mechanics would mean better servicing of existing equipment and add to its life. In the transport industry alone, millions of rupees will be saved every year if the rate of replacement of vehicles could be reduced. Better mechanics can be obtained only through more and better education. The benefits would not however be confined to business alone. Increased education would lead to an addition to the national wealth and create the basis for an expansion of necessary social services. Education alone can create the material basis for an improvement in the standard of life of our people. It is also the necessary condition for the training of mind and character which will permit the people to make a creative use of their leisure. Social education is thus the foundation on which alone free India can build up a Welfare State which will recognize the claims of both individual freedom and social security.

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ON INDIAN UNIVERSITIES

UNIVERSITIES in India have recently come in for a great deal of criticism—some justified some not. It has at times been said that the education they impart is far too theoretical and does not prepare an individual for practical life. In particular it is said their products develop an aversion to manual labour and rural life. They have thus become one of the main agencies for drawing away able and enterprising youths from the countryside to the town. What is the loss of the village is not however always the city's gain. Instead of becoming leaders in a small village community—which they might well have been—they often become bitter and frustrated members of a city's anonymous humanity.

There is another line of criticism which condemns the universities for an almost contrary reason. According to these critics the universities were fashioned to turn out only clerks and other subordinate staff needed by the administration. They say that when the British established their dominion over India they reserved all the superior posts for themselves. Since however no administration can be carried on without a large army of underlings, they decided to give a number of Indians enough knowledge of English to serve the purpose. It is to satisfy this need that Western education was introduced and the universities established. The universities according to these critics are therefore nothing but factories for turning out clerks.

While there are elements of truth in both criticisms it is obvious that they are exaggerated and unfair. University education must from the nature of the case be somewhat abstract and academic. Man's superiority over the rest of creation depends on his power of generalization and no one can generalize without breaking

away—maybe temporarily—from the demands of the particular and the practical. Some of the most useful and far-reaching uses of science owe their origin to men whose sole concern was with pure theory. One need not however deny that education becomes unreal and meagre unless there is constant interplay between theory and practice. To the extent that Indian universities have neglected this aspect of higher education, they certainly have failed to carry out one of the main purposes of a university.

The second line of criticism invites similar comments. It is true that a large proportion of the products of Indian universities are fit only for white-collar employment, but it is not true to say that universities were established to turn out clerks. In fact the main pressure for the introduction of Western education in India came, not from the Government of the day, but from Christian missionaries and a band of far-sighted Indians who foresaw the intellectual renaissance it would bring about. Besides, the courses at the university with their emphasis on mathematics and logic, politics and poetry, physics and philosophy are hardly the best training for future clerks. If the universities had really aimed at turning out subordinate staff for the administration, they would have cut out all such academic subjects and concentrated on *précis* writing, simple accounting and office manuals.

It may also be pointed out that the two lines of criticism largely cancel one another. If the university courses are severely academic and theoretical, it is obvious that they are not intended to turn out clerks. If on the other hand, universities are factories for the manufacture of subordinate employees, it is evident that they cannot be condemned on the ground that their products are not fit for employment. One may still criticize them for turning out more clerks than are needed but such criticism is quite distinct from and in fact contrary to the one that university products are not fit for employment.

The real defects of university education in India arise out of inadequate staff, insufficient funds and a wrong attitude to higher education. The staff is inadequate not only in number but also in quality. Many of the ablest men and women turn away to

professions other than teaching. Economic consideration is one of the main reasons for such a situation. This brings us immediately to the question of funds. *Insufficiency of funds* is responsible for not only poorly paid and therefore poorer teachers but poorer libraries, laboratories, classrooms and other essential amenities. The surroundings in a university are often such as to prevent any attempt at serious and sustained work. The gross disproportion of teachers to students also arises partly out of the lack of funds and partly out of a wrong attitude towards higher education. There is little doubt that a large number of those who come to universities do so only because they look upon a university degree as a passport to employment. In their early days Indian universities were able to offer profitable and in many cases satisfying openings to all their alumni. The public thus came to associate university education with employment. Today, the universities can no longer guarantee employment to all graduates and are therefore condemned. It would however be fair to recognize that such condemnation is based on social, not academic considerations.

Notwithstanding all their failings and defects, one thing cannot however be gainsaid. Indian universities have made a definite and valuable contribution towards the awakening of a new national consciousness. With all their defects, they can claim to be one of the chief architects of our freedom, but independence has imposed on them new and more exacting tasks. India has chosen to be a democracy, and democracy implies the assurance to all of justice, liberty and equality. Indian universities must henceforth be judged increasingly by the contribution they make towards the attainment of these goals.

II

What distinguishes the modern from all previous ages is the compulsion to think and feel, and still more important, to act unitedly. In earlier days it was possible for different societies and communities to live in comparative unawareness of one another. With undeveloped means of communication distances really divided. Natural barriers also isolated one people from another.

The length of time which it took to travel from one country to another added to the differences, physical and psychological, between communities. Today all such barriers are disappearing if they have not already disappeared. Man's technological advances make it possible to travel from one part of the globe to any other part in the course of a bare twenty-four hours.

Modern scientific progress began some three or four centuries ago but the conquest of distance is an achievement of the last hundred years. Toynbee, in one of his lectures, points out that it took a British statesman in the middle of the nineteenth century exactly the same time to travel from Rome to London as it took a Roman emperor in the first century to travel from Great Britain to Rome! By the end of the century, the journey could be accomplished in perhaps forty-eight hours—as many hours as it took days only fifty years ago. Today with jet and supersonic planes, we are fast approaching a stage when it may become possible to travel from London to Rome or vice versa in as many minutes.

Along with this condensation of space and time there has developed an increase in command over the forces of nature, for good as well as for evil. Formerly a ship lost in a mist was lost indeed. Today, even a single mariner marooned in the remotest corner of the pole can hope to establish contact with possible rescuers thousands of miles away. In the past, human instruments of destruction could kill at most a few persons. Today one atom or hydrogen bomb can wipe out a city of a million or more.

This acceleration in communication has had far-reaching effects upon problems of social, economic and political relations. It has also made international understanding a far more important and necessary ingredient for national well being than ever before. In the past when distances really divided, men in different parts of the world could afford to maintain different mental and moral standards. Physical proximity accompanied by spiritual distance can create a truly explosive situation. Today all men are literally one another's neighbours. Gone are the days when a nation could move within its own frontiers and pursue with greater or less

success the course of its own development. Today, whatever happens in any one part of the globe immediately affects all. Man's psychology has not however attuned itself yet to this vast change. Intellectually he knows that the world is one, but even today his emotional reactions are parochial, or at most national. The time lag between the development of man's intellect and his feelings is one of the main problems which faces the contemporary world.

History is full of examples which show that the restriction of any one of the human values to any select group or coterie in the end leads to the denial of all of them to the entire community. What was true in the past of individuals or groups within the nation, is true today of nations in a world community. Universality in the application of these values is, therefore, an essential pre-requisite to democracy. It is thus obvious that if Indian democracy is to be real, her people must take an intelligent interest in national and international affairs. Economic and political considerations transcend national barriers in the modern world. Knowledge of one's own country would remain incomplete and unreliable without knowledge about other countries. Besides, politics and economics have become so interlinked today that the State must perforce play a far greater role in the life of the average individual than at any time in the past. A citizen of modern democracy must, therefore, possess knowledge which in the past was the pride of only a favoured few.

The function of education at any time is to widen the horizon of experience. Our direct contact with reality is always limited. If man had to depend solely upon his immediate experience, his progress would have been severely circumscribed. Man has risen above the rest of creation through his awareness of the experience of other people at other times. But for this capacity, man with his extremely weak senses, would have succumbed long ago to stronger rivals. If education expands the mental horizon, it is obvious that the higher the education the wider is the horizon it opens before us.

In existing circumstances higher education is, however, denied

to all except a small proportion of the people of any country. In many countries, even the provision of elementary education is neither general nor complete, though such elementary education can provide only the essentials for survival. Unfortunately, this is the stage at which the majority must, as far as we can foresee, rest. Some 80 per cent. or more of the people of any community do not go beyond such elementary education. Neither do their lives move out of the orbit of their immediate neighbourhood in normal circumstances. The majority of them will spend their lives within a circle whose radius is perhaps ten, or at most twenty, miles.

It is only a minority who go beyond elementary education. They may again be divided into a smaller and a larger group. The larger will not normally go beyond secondary education. The sphere of their interest is somewhat wider and their mental horizon is also correspondingly larger. Even they, however, will not normally play any active role in the shaping of a country's policy or the determination of events outside their immediate neighbourhood. They will have to depend for their information and judgment, their energy and initiative on the still smaller group who will receive the benefits of higher education. On this small group will fall the responsibility of interpreting their country to the world outside and of the world outside to their countrymen.

If, however, democracy is to function properly, at least general education must be spread among all citizens. Provision of such education for the people is as much an obligation of the State as the maintenance of law and order. It is in any case too vast an undertaking for any private or voluntary agency. Teachers even in elementary schools must possess a little more knowledge than they are expected to impart to their pupils. Teachers in the secondary stage must similarly possess knowledge of at least a university standard. The organization of a national system of education will also raise problems of maintenance of standards, provision of ancillary services, administration, supervision and inspection. These require men with a higher training than can be reached in the elementary or even the secondary stage of education. In other words, the provision of even the most rudimentary

education to the vast majority of the people demands the maintenance of a large body of men and women who have been trained in universities

Education in general, and higher education in particular, must therefore play a vital role in the modern world. Any improvement in the standard of life of the people depends on the increase of the material wealth of a country. Such increase demands a more efficient use of its human and other resources. This is becoming more and more a function of the development of scientific and technical knowledge. Nature may be the ultimate source of all wealth, but modern man is seeking to utilize her processes for his own ends. Truly has it been said that in the modern world there is no country which is as such poor or rich. A country is poor or rich today according to the state of knowledge of its people. Science has reached a stage when almost anything can be made to perform almost any function. Chemistry has created food and drink out of coal and chalk, clothes from plastics and replaced metals by artificial constructs.

Universities must also serve as centres to foster international knowledge and understanding. National progress in the modern world cannot be achieved except against the background of international understanding and peace. Wars are always destructive, but in the past, wars were often restricted to one region of the world. Even in the affected parts, the civil population had some measure of immunity. Today, a situation is fast developing where there is no room for neutrals or non-belligerents. Modern war, therefore, brings impoverishment to the whole world. Besides, industry, trade and commerce have become so integrated that any development, benign or otherwise, in any part of the world cannot but have repercussions in all other parts. It is, therefore, imperative that at least the leadership in each country, if not all citizens, must have knowledge and judgement so that they can conduct the affairs of their country in the context of an international background.

The role of leaders is important in any form of society. Without a body of leaders, the vast amorphous mass of the people cannot

act. In forms of society other than democratic, the leaders are born and are accepted on the basis of their birth even if they are lacking in the quality of leadership. People follow them by habit or instinct, if not by convictions, and hence society can at least function. In a democracy, this instinctive or habitual submission is replaced by voluntary obedience. The role of leaders is, therefore, if anything, even more important in a democracy. Non-democratic allegiance is passive while democratic loyalty is deliberate and the result of conscious choice. Democracy must, therefore, select its leaders on the grounds of character and ability but even character and ability are not enough in the modern world. The leaders of today must also have knowledge and enlightenment. The condensation of the world and the increase of scientific knowledge have combined to place a vast potential of power in the hands of contemporary man. Errors of leaders of the past could lead to the suffering of a tribe or a people or at most a nation. Errors by leaders in the present atomic age can lead to total destruction of the world.

The importance of the role of the leaders makes the provision of a national system of education still more necessary in a democracy. A democracy must recruit its leaders from all sections of the community. It is, in fact, not a democracy if there are any privileged classes or groups which enjoy the prerogative of supplying the leadership and enjoying attendant advantages. Democracy must therefore offer equal opportunities to all, and this it can do only if the same facilities for education are available for all. Even then individuals will differ and will continue to differ from one another in various ways. Such variety is not, however, inconsistent with democracy. Nor does democracy mean that all individuals in a country must share in the actual administration of the State. Any attempt to do so would result only in chaos. Democracy must only guarantee that functions allotted to individuals are based on capacity and not on the accident of birth or wealth. Even if equal opportunities are offered to all, some will surpass their fellows by innate qualities of intellect or character. They are the natural leaders of a community. To deny them leadership is just as un-

democratic as to accept the leadership of incompetent persons born to positions of power and wealth

III

There is one other function which, like their counterparts in other countries, Indian universities must perform. This is the creation of a necessary balance between tradition and experiment, between stability and change. It is a truism that no society can remain fully static. The pressure of external events is continually reshaping its contours. Minute internal changes also gradually transform its character. No living society can thus be immune from change. In fact, the capacity to respond to external and internal stimuli is a measure of its vitality. Thus power of adaptation and adjustment must, however, be based on an inner stability and unity. Otherwise a society would not only change but disintegrate and finally perish.

We often talk of great revolutions which have changed the character of a people or a country. A revolution marks a violent change from the past, but no revolution is a complete breakaway. The developments of the French or the Russian revolutions were rooted in the character and history of the French and the Russian people. The French Revolution could no more exhibit the characteristics of the Russian Revolution than the Russian exhibit those of the French. In a revolution processes of slow and imperceptible change are suddenly thrown into sharp focus. The results are nevertheless only the culmination of persistent trends. Compared to what happens to a primitive society when confronted by a civilized community, our revolutions are cases of minor modification. We have seen examples of this when Australoid tribes or American Indians were faced by people of European countries. The result was complete disruption of the primitive culture and disaster and death to the people of the indigenous tribes.

Healthy progress, for societies as well as for individuals is possible only so long as there is equilibrium between the forces which promote stability and those which provoke change. The

law of inertia operates in society as in the world of physical matter. Men generally avoid innovations unless forced by circumstances to accept them. A highly developed society is therefore often averse to change, and education which is a factor in such development is also often a conservative force. It is, however, never so conservative as mere habit or custom, for it acts as a liberalizing force by presenting to the mind a wider range of customs—past and present, local and foreign—than we can ever have in direct experience.

Education can thus develop an attitude which will accept changes in traditions without violent upheavals. Primitive societies which are governed more by customs and traditions do not exhibit the same resilience and break up when faced by civilized communities. The higher the education, the wider the range of experience it brings before the view. Higher education thus enables men to distinguish between what is permanent and what is ephemeral in existing attitudes and institutions. It also trains them to evaluate what is novel, so that a value is not rejected simply because it is new. It expects citizens to balance the present by the past and prepares them to meet the challenge of the future. Indian universities, like universities elsewhere, must perform this dual function of maintaining the stability and developing the resilience of society.

IV

We may now turn to a function which is perhaps peculiar to Indian universities. This is to serve as a catalytic agent for the synthesis of cultures. Such a remark may at first sound paradoxical. One of the most striking features of Indian culture has been its power of assimilation and synthesis. The unity in diversity already achieved is considerable, but is not on the plane of conscious thought. The synthesis has been largely instinctive and based on the urges derived from feelings and emotions. This has been one of the main reasons why we find in India parallel societies and cultures existing side by side. Many of the tragedies of Indian history are due to this failure in integration and consolidation.

The clearest evidence of this is seen in the existence in India of three systems of education which have flowed in parallel streams. In almost all Western countries education has a general unity in spite of the great diversities which particular institutions or disciplines may exhibit. The climate of intellectual life in the West is dominated by the influence of the natural sciences. It has affected even disciplines which consciously seek to oppose science. Western education has its own internal divisions but such differences are not comparable with the divisions which prevail in India. In the West education has an overriding unity because of its roots in Hellenic and Hebraic traditions and the pervasive influence of the scientific outlook.

We have in modern India three parallel systems of education which derive from ancient India, medieval India and the impact of the West. After an initial phase of free philosophical inquiry, ancient Indian education became academic, literary and largely traditional. It developed an authoritarian temper which was perhaps inevitable in a society where only a minority had access to learning. These fortunate few alone had access to India's vast intellectual riches. Some fragments of their knowledge reached the masses through legends and stories and the moral discourses of saints and religious teachers. It was however only a fraction of what the initiated knew. Society thus developed a bipolarity in which knowledge and wisdom were concentrated in a small minority at one pole while at the other pole the vast majority remained steeped in ignorance and superstition. It is not surprising that inelastic dogma and the iron law of tradition and custom should soon dominate the temper of such society.

In the Middle Ages Moslem rulers brought to India their own system of education shaped under the influence of the traditions of Arabia and Persia. Early Islam was revolutionary and democratic. In consequence this new system was democratic in theory. In practice it also was confined to a small section of the people. There were no barriers based on birth but the duration of the course was so long and the syllabus so difficult as to dissuade all except only a handful of devoted pupils. Like ancient Indian education,

this system also soon became authoritarian and dogmatic. What was more unfortunate was that it developed independently of and almost in opposition to the indigenous Indian system. If the two systems had established points of contact, their distinct dogmatisms may have led each to modify its own dogmas, but they continued like parallel lines that never meet.

After the advent of the British, there was a powerful challenge to these systems from a new source. It did not however lead to a unification of Indian education. On the contrary, it added a third system to the existing two. Western education was, in theory and also increasingly in practice, open to all. It recognized neither caste nor religious distinctions. In fact, some of the less privileged groups were the first to take to it. Its emphasis on science and experiment brought a new element into Indian life. The establishment of universities, as we know them today, encouraged the growth of a critical spirit and led to a questioning of old values. There was, however, no attempt to combine the heritage of ancient, medieval and modern knowledge and develop a truly national system of education.

People living in the same country cannot, however, remain completely aloof. Geographical contiguity must inevitably lead to human contacts. Exigencies of existence compelled Hindus and Moslems to come to terms. Quite early in the Middle Ages, they established points of contact at many levels. In the courts and the cities, patterns of common behaviour grew out of the desire of worldly advancement. In the villages, common beliefs and customs developed through the teachings of reformers, religious teachers and poets. Men like Chaitanya, Nanak and Ramananda broke down the exclusiveness of the Hindus and worked to narrow the distinction between Hinduism and Islam. There were men like Kabir, Chisti and Nizamuddin who attempted understanding and unification from the side of the Moslems. Some of the learning of the scholars in each system also percolated to the masses but in the process it was often changed beyond recognition. After the advent of the British new points of contact were established as in the Middle Ages. Old traditions and customs were

disturbed by the impact of Western thought but, as before, a *modus vivendi* rather than an intellectual synthesis was established.

These approximations in belief and conduct were of great value in affairs of daily life. One may even describe such approximation as a synthesis, but it was a synthesis on the level of practice, emotion and intuition. Without the support of critical and careful thought, it shared in the weakness common to all instinctive attitudes: it could only hold so long as it was not challenged by a contrary instinct. Based on the urges derived from feelings and emotions, the synthesis has also lacked the solidity which intellectual articulation alone can give.

V

Three parallel systems of education have thus existed side by side in India for almost a hundred years without that interpenetration which is necessary for developing a common outlook. The first is based on the ancient Indian tradition with Sanskrit as its vehicle, the second on Islamic ideas through the medium of Arabic and Persian and the third on the outlook of modern Europe with English as its language. Except in the case of rare spirits like Faizi and Dara or in a later period Raja Ram Mohan Roy, the intellectuals of the day did not seek to achieve a synthesis between these parallel systems of education and knowledge. A handful among Hindus took to the study of Arabic and Persian for economic and political ends, but to them Sanskrit remained a closed book. A smaller number of Moslems studied Sanskrit. After the advent of the British, English was increasingly studied at first by Hindus and then by Moslems, but the majority, whether Hindu or Moslem, continued within the orbit of one system of education. The Sanskrit *śāls* and the Arabic *maktabs* remained separate worlds closed to the men who had studied English.

Much that is unsatisfactory in modern Indian life is due to this segregation of different groups in different compartments. Even today we have people whose education is influenced solely by the ideals and modes prescribed in ancient India. Time for them came

to a stop some fifteen hundred years ago. There is another group versed in Arabic and Persian but innocent of the traditions of Sanskrit learning and the modern knowledge of the West. University men, on the other hand, are often ignorant of Sanskrit, Arabic and Persian. Universities and other organs of higher education have thus failed to reflect the synthesis which saints and poets, reformers and preachers and even simple men and women of little or no learning have achieved on the planes of religion, ethics and art.

Men and women living together can never be segregated completely. Groups isolated intellectually have, therefore, established contacts in the fields of feeling and behaviour. This lack of integration between intellect and feeling has, by a curious reaction, led to a growth of compartmentalism in the individual mind. A man who accepts western science intellectually is steeped emotionally in traditions of ancient or medieval India. The latest fashion of thought exists side by side with a primitive mode of behaviour and feeling. Even if we dismiss such cases as aberrations—and their number is too great to justify easy dismissal—there is no denying that the co-existence of three independent systems has impoverished the intellectual life of a majority of educated men and women of modern India.

The absence of a common system of national education has been one of the main reasons why so many Indians exhibit even today a regional, linguistic or communal outlook. In other countries, universities have helped to bring into one common pool the heritage of every element in the national life. This has not happened in India with the result that different communities and linguistic areas have developed and retained a sectional outlook.

VI

The restriction of higher education to small selected groups has had another undesirable effect on Indian society. We have already referred to the bipolarity to which it led in ancient days. Society developed unequally, and in course of time, the *élite* began to

look down upon the humble but necessary avocations followed by the majority of the people. The portals of higher education are opening to a far larger number today but the old attitude of indifference, if not contempt, for different types of manual labour has not disappeared. On the contrary, we find evidence of widening difference between the rural and the urban population. Till the Middle Ages, the difference between town and village was one mainly of degree. Today the difference is so great as to make them seem alien to one another. The villagers still live in the past. The towns have caught with the tempo of the twentieth century. The gulf between village and town has been further widened by the migration from the village of all who receive modern education. This has led to a weakening of national life by creating fresh divisions within the people, and in addition, induced in the town-dweller an attitude of patronage, if not contempt for the villager.

A vast attempt is now being made to overcome this gap between the city and village. Some account of the effort has been given in the chapter on social education, but there is one special feature to which attention may be drawn in the context of higher education. Till very recently, institutions of higher learning have been concentrated in the towns. This has not only denied opportunity to the villages but what is worse has tended to draw away from the village its ablest and most energetic members. Rural youth who have come to town to study have rarely returned. The concentration of university and other institutions of higher learning in towns has had another drawback. Their gaze was turned towards the city and its problems. Hardly any attention was paid to the special needs of rural areas and this in spite of the fact that the vast majority of the Indian people live in villages. It has therefore become a matter of concern to the nation to create institutions of higher education in rural areas and given rise to the demand for Rural Universities.

It must however be admitted that the concept of a rural university has not been clearly defined. A university does not become a rural university simply because it is located in a village or deals

with problems which are of greater concern to rural than urban people. Nor can one define at the university level subjects which are of a specifically rural import. One of the essential characteristics of higher education is that it tends to become abstract and general. On the other hand, it is necessary to ensure that adequate facilities are available to rural youth so that they are not compelled to migrate to towns. It is also natural that location will determine to some extent the interests and orientation of the pupils. A special committee was appointed to go into the whole question of higher education for rural people. It has held that there can be no difference in the aims and objects of higher education as between urban and rural areas. Nevertheless rural areas have their own special problems to which sufficient attention has not been paid by institutions located in towns. To remove this deficiency and to provide young men and women in rural areas with the opportunity of higher education, the Committee has recommended the establishment of a number of *Rural Institutes*. These will provide three-year courses after the secondary school stage and aim at a standard comparable to the first-degree course of existing universities. As independent institutions, the *Institutes* will however have much greater freedom than colleges and be in a position to vary the choice of subjects and the distribution of emphasis to suit local needs. After these *Institutes* have worked for several years, the position may be reviewed to decide about the need, the nature and the scope of rural universities.

VII

Contemporary India is seeking to achieve in decades what the Western world has taken centuries to accomplish. The industrialization of the West was spread over at least three hundred years. India is seeking to carry out such industrialization in perhaps thirty years. It is true that the beginnings of industrialization in India may be traced back to about a hundred years, and the First World War gave a great impetus to the growth of modern industries. Old traditional forms of life however continued almost

unchanged because of India's peculiar political and economic situation. Modernization began in real earnest with the outbreak of the Second World War for it was only then that the full impact of modern industrialization was felt. After attainment of independence, India has deliberately decided to carry out the process of industrialization and consequent changes in her social economic and cultural life by democratic means. The changes which are taking place in India today are thus truly revolutionary, but by and large they are being brought about with the consent and the co-operation of the people.

The spread of democracy and the growth of industrialization inevitably lead to expansion of higher education. It is significant that the extension of higher education to all people took place in the country which was the first to accept political democracy as its creed and large-scale industrialization as its economic policy. Democracy cannot function without extension of education to all social levels. Industrialization with increasing use of machines is equally dependent on it. As the use of machines grew, so did the need for the spread of literacy. It is significant that the spread of education has a direct relation to the degree of mechanization attained by society.

With India's decision to develop a modern democratic society, the need for bridging the gap dividing different sections of our people has increased. Linguistic, religious and caste barriers must be overcome to develop a common national outlook. Difference in development between town and village must be eliminated if society is to function as a homogeneous unit. Social changes in democratic communities have generally been unconscious and unplanned. They have happened rather than been the result of deliberate action. In totalitarian societies, on the other hand, the wishes of the people have hardly been taken into account. India is seeking to plan her future consciously and deliberately and at the same time with the knowledge and participation of her people. This ambitious ideal can be achieved only if there is throughout the country an enlightened leadership inspired by common ideals.

Indian universities have thus a special role to play in the evolution of a common culture but have not done as much as one would have liked. One or two examples will indicate why the universities have failed. Till quite recently, those who studied philosophy in our universities devoted all their time and attention to European thought. Indian philosophy found a footing in the beginning of the century and is gradually increasing in importance. The organic inter-relation between different types of thought is however not yet fully realized. Even today European, Indian and Islamic philosophies are treated as isolated and self-contained subjects. What is worse, Indian philosophy is often treated as an alternative to Arab thought. A national system of education would require systematic and connected study of the three systems—Indian, Saracenic and European—which have influenced modern Indian consciousness. Our increasing international contacts require that even elements, which have not directly influenced Indian thought, should find a place in our reorganized syllabus. The systems of the Far East are today almost unknown, but there can be no clear picture of the evolution of human thought if their contributions are ignored. It is only on the basis of such general knowledge that specialization of any particular field can be fruitful and creative.

The field of study of languages offers another example of how our syllabuses are circumscribed. The main strength of a course like *Literae Humaniores* in Oxford is that it brings intelligent young minds into contact with two of the most important civilizations of Europe. Every student taking this course must know Greek and Latin and study the philosophical thought as well as the political and economic structure of both Greece and Rome. In India, on the contrary, those who study Sanskrit often remain ignorant even of Pali. Similarly many of those who study Persian know little Arabic. No Indian University has yet framed a unified course for Sanskrit and Arabic or Pali and Persian. If Indian culture, in all its aspects, is to be understood, there must be at least some scholars who are equally at home in the world of Sanskrit and Persian, Pali and Arabic. European students of the classics develop maturity of judgement and attain intellectual sweep

through their acquaintance with the two rich and varied civilizations of Greece and Rome. If our courses in the classics were organized on the same liberal lines, our classical scholars could, through their knowledge of the civilizations of ancient and medieval India, develop an outlook at least equally broad and humanitarian.

One criticism against such a proposal is likely to be that it would make for an extensive rather than an intensive study of the classics. The criticism is not, however, justified. Those who do not have a scholarly spirit will make only a superficial study of whatever may be their field of study. At present, such students have a superficial knowledge in a narrow field. On the other hand, those who love knowledge and scholarship will continue to develop specialized knowledge in some chosen field of study. A broader syllabus will only help them in gaining a deeper insight into their specialized subject. If our universities are to serve their true purpose, they must provide a broad and national system of education in which the different trends of our national culture are brought into one common focus of study and evaluation.

The significance, variety and vitality of Indian culture cannot be understood unless we have knowledge of the many sources from which it is derived. Indian universities, as repositories of culture and pioneers of progress, must therefore evolve courses which reflect the many-sidedness of Indian life. The universities must provide a meeting ground where values inherited from ancient and medieval India can be combined with the fresh influx of knowledge and experience from beyond the seas. Only in this way can the universities serve to unify the diverse elements within the nation and create among the people the imaginative vision and intellectual breadth necessary for the attainment of the goal of 'democracy, justice, liberty, equality and fraternity' enunciated in the Indian Constitution.

January 1955.

THE STUDY OF ENGLISH

It may appear a little surprising but it is nevertheless a fact that there has been an increase in the demand for the study of English since independence. Sections of the people who were formerly indifferent have now become keenly interested in such study. This is particularly true of rural areas. In the past many village schools had no provision for the study of English and hardly any one complained. Today, the villagers are increasingly demanding that rural schools should provide the same facilities for the study of English as are found in urban schools.

There are various reasons for this development. In the past the Government tended to pay greater attention to the wishes and needs of the towns. Educational facilities were therefore largely concentrated in urban areas. Even when people in the villages felt the injustice of the arrangement, they often lacked the initiative or the courage to make their demands felt. Today people all over the country are becoming more conscious of their influence and power. Villagers are no exception and are demanding that their children should not be denied the opportunity which children in urban areas enjoy. This is perhaps one major reason why there is an increasing demand for the study of English in rural schools.

It may even then appear incongruous that so much importance should be given to the study of a foreign language after the attainment of independence. Formerly, English had to be studied by anyone who wished to get on in life. It was a necessary condition for employment under Government. Nor could one succeed in the professions without adequate knowledge of the language. Even for those who took to commerce and industry, ignorance of English was a handicap. In spite of such compulsions, there was a strong feeling against the language in pre-independence India. Even those who recognized its value as a vehicle of culture and

scientific knowledge were agreed that the undue emphasis given to its study must cease. Now however the attitude has completely changed. Today, when the country is free and if we wish we can altogether abolish its study, there is a steadily increasing demand for it among all sections of the people and in almost all areas.

How widespread this demand is was seen clearly in the course of a recent survey to assess the position of higher education in rural India and make recommendations for its improvement. Such a survey had become necessary for obvious reasons. A democracy must provide equal opportunities to all its citizens. One of the most important of such opportunities is that for pursuing studies up to the highest level. In pre-independence India, facilities of education were very unevenly distributed. It is true that the majority of elementary schools was located in rural areas but this was not proportionate to the distribution of the population between village and town. Besides, village schools were almost invariably poorer in quality. The scales were even more heavily weighted against the village in the secondary stage while at the post-secondary stage, almost all institutions were situated in cities and towns.

Village people thus lacked the opportunities which their more fortunate fellow-citizens in the towns enjoyed. There was another drawback in these arrangements. Young persons from rural areas had to come to the towns for higher education. Once they spent their most impressionable years in urban surroundings it was not surprising that many of them refused to go back to the village. The drift of people from rural to urban areas has attracted increasing attention and concern. One of the major causes for such drift is the lack of facilities for education in rural areas.

Provision of enlarged facilities of education in villages is therefore necessary to meet the requirements of democracy and provide equal opportunities to all. It is also necessary if we are to check the one-way traffic to towns. This will mean not only an immense expansion of the facilities at elementary and secondary levels but the creation of new facilities at higher stages. It was in order to deal with the problem of higher education in rural areas that the

Government of India appointed the committee of which mention has been earlier made. The committee wherever it went found that not only is there a pressing demand for higher education in general, but a very special demand for enlarged facilities for the study of English. This was brought out vividly in the reply of a young boy of 11 or 12 from an area which till now has been regarded as educationally backward. In answer to a question put to him, the boy stated that he wanted to study English more than anything else. When he was asked to explain his preference for English, his reply was, 'How can I become the Prime Minister of India if I do not learn English?'

One may dismiss it as a foolish remark of a foolish child but there is a Biblical saying that truth often comes out of the mouth of babes and infants. In this case also, the boy was giving expression to a truth even though he was not aware of the implications of what he said. If we look beneath the surface, we will realize that his reply was symbolic of the age. It expressed two urges which have become universal in contemporary India. The first is an urge for democracy and growth of democratic awareness which made it possible for a village boy of a backward area to think of becoming one day the Prime Minister of India. This urge carries with it the demand that democracy must provide equal opportunity to all. If English is considered a necessary subject of study for the children of those who now wield political power, it must be equally so for the children of those who till now have become subjects but not citizens.

The other urge which the boy unconsciously expressed is that for participating in the larger life of the world. In the modern world it is not enough to know only about one's own country. Any one who seeks today to attain eminence in any field must be in contact with the great currents that are sweeping through the world. Leadership in the modern world cannot be achieved without the knowledge of the history and economics, the politics and the religions of many lands. English is a symbol of this contact with the outside world and that is why the simple village child wanted to study it more than anything else.

I

What is most characteristic of contemporary India is a growing sense of democracy in which equality of opportunity must be offered to all members of the community. In a sense, this is a revolutionary break from our past and not only ours. This new democratic urge marks a break-away from older social conceptions throughout the world. Like other ancient societies, Indian society also has in the past been largely hierarchical. Today the basis of such hierarchical society has been destroyed throughout the world. In many countries, the struggle is between the outworn social forms and the new urges which cannot be contained in the old moulds. If it be asked what has brought about this revolutionary change in human affairs and outmoded hierarchical society, the answer is to be found in the immense advance of science and technology. If again it be asked how this advance in science and technology has been possible, the answer is perhaps to be found in man's increasing knowledge of the secrets of nature, in a word, in the immense expansion of education and knowledge in the modern world.

It is not an accident that the progress of science has been accompanied by a growth in the democratic spirit. We should realize that no discussion of the function of education in democracy can be adequate if it overlooks the fact that these advances in knowledge have created a situation unprecedented in human history. Hierarchical societies could exist in the past for two reasons. Because of unsatisfactory means of communication and transport, the world was divided into a number of separate societies without any contact with one another. Each of such societies had its own peculiar hierarchy and its special system of privileges. Within the range of any one society, the individual had no occasion to question its validity. Very often he had no knowledge of any order other than the one in which he was born. In such circumstances, it was not surprising that hierarchical societies could persist through centuries.

The second reason for the existence of hierarchical societies was

based on the then economy of the world. It was essentially an economy of want. Because of man's limited control over the forces of nature, the total amount of available goods and services was limited. Leisure was unknown except to those who lived on the toil of others. Leisure and a surplus over the minimum requirements of life are however essential conditions for the progress of civilization and culture. In the prevailing economic organization of society, individuals or classes could enjoy a surplus or leisure only if others were denied some of the bare necessities of life. In such a society, slavery was perhaps inevitable. We find that even philosophers so liberal and humane as Plato and Aristotle were reconciled to the institution of slavery. They felt that in the conditions which then obtained, culture could not be achieved unless the majority produced a surplus of wealth which the minority enjoyed.

The advance of science led to improvements in technology by which the basis of the world's economy has been changed. Enough can be produced today to meet the requirements of everyone. In fact, the common man enjoys today many amenities that were denied to kings and aristocrats. One man's leisure need not therefore be purchased at the cost of another man's drudgery. One of the major reasons of social hierarchy has thus disappeared.

The advance of technology also led to improved means of communication and transport. Distance or physical obstacles no longer divided peoples. The result was an increasing condensation of the world. Societies and peoples with different cultural backgrounds and at different stages of development were brought into close contact with one another. These contacts between different types of societies and individuals made people realize that there is nothing sacrosanct in any particular system of hierarchy or privileges. From this it was only one step to question the special prerogatives enjoyed by individuals or groups within a society. A process of comparison led to the elimination of many of the accepted beliefs. Men increasingly realized that no individual has the right to any special privilege by reason of birth or status.

The advance of science contributed to the break-up of a

hierarchy of privileges in another way. The advance of science became possible only when the human mind developed a new attitude towards the individual. This new attitude looked upon the individual as an instance of a universal or a member of a class. Simultaneously, it based the validity of the universal or the general law on its application to individual instances. Science started on its triumphant career when particulars were treated in their general aspect and the general law related to instances of unique individuals. This new outlook did not remain confined to science and was soon extended to the social field. This led to the growth of an intellectual atmosphere in which the special prerogatives of individuals or groups was neither accepted nor justified.

The breakdown of social hierarchies was followed by a tremendous release of human energies. The removal of restrictive strata gave for the first time a sense of liberty and equality to millions who had formerly accepted their lowly position in society as ordained by fate. It is not accidental that more progress has been achieved in the last five hundred years than in the last fifty thousand years of human history. The shape of things has changed at an unprecedented rate and is still doing so. It is also significant that the changes achieved in the last fifty years are even greater than those achieved in the last five hundred years.

This tremendous acceleration in the process of change has posed new problems before the human mind. A position has been reached where man if he is to survive at all must survive as members of one family. Industrially, economically and in a sense even politically the world is today one. Events in any one part have repercussions in the remotest corners of the globe. Man's mind has not however become acclimatized as yet to this unity of the human family. It is this time lag between achieved unity and the failure to realize it that is responsible for many of the problems from which the modern world suffers.

A sense of unity of the world is not an entirely new phenomenon. Throughout the ages, prophets and seers have proclaimed the unity of man. Every culture of civilization or the past has been potentially a world culture or world civilization. In the days of

India's ancient glory, the spirit of Indian civilization pervaded all the regions known to the Indians of those days. The same remark applies to the spirit of Chinese culture or Egyptian civilization. During the Middle Ages, Arab civilization had a similar pervasive influence over the whole of the then known world. The difference between these earlier essays in world civilization and the position today lies in one significant fact. These past civilizations aimed at and were potentially world civilizations, but because of the lack of the necessary scientific and technical equipment, the unification of the world remained only an ideal. Today, the achievements of science have turned that ideal into a fact.

II

It is in this context of a world that is becoming increasingly one that we have to think of the place of English in our intellectual heritage. The old civilizations that flourished in the past had each as its vehicle some language which was what one may call the language of the epoch. Thus, in the days of its glory, Sanskrit and its associate languages were a vehicle of culture not only for Indians but for the people of the whole of the South East Asian regions. Similarly, Latin served as a bond of unity for the whole of the world which acknowledged Roman law and Hellenic civilization. In the Middle Ages, Arabic served the same function for the then civilized world. After the eclipse of Arabic, there was for several centuries uncertainty about its successor. For a time it seemed as if French might become, in fact as it was in name, the *lingua franca* of the world. In the end, however, English triumphed. Can anyone deny that today English is in a sense the vehicle of the culture of the age?

The experience of history shows us that the supremacy of each civilization was linked up with a language which was its vehicle. Other languages derived much of their sustenance and strength from their contact with the dominant language of that age. All the languages of modern Europe have developed by their borrowings from not only Latin and Greek, but also from Arabic. Much of

the vigour and wealth of the modern European languages is derived from what they incorporated from these classical languages. In fact, it is only through such contacts that a language can prepare itself for the role of *the* world language or one of the world languages of the next era.

If we recognize this function of a language in a particular phase of history, it is easy to understand why English has had a tremendous influence on the development of national consciousness in India. The British did not conquer India merely by force of arms. In most cases, they took advantage of the clashes between rival Indian rulers and by successfully playing one against another, created a situation where power came to their hands almost unasked. When they first came to India the British were inferior to the Indians in the arts of civilization. They had, however, laid the foundations of military superiority by the application of science to warfare. Stratagem combined with victory on the battlefields enabled them to establish their political domination. It is doubtful if even then they would have succeeded in imposing English upon the Indians to the extent that they actually did unless English had by that time developed into the major vehicle of modern scientific civilization. Indians accepted English readily and without demur, because it brought India within the orbit of the Western civilization of the day.

The impact of English upon the Indian mind can be seen in various manifestations of which two had results of far-reaching benefit. On the one hand English brought the message of political democracy and a sense of national unity. The tradition of struggle for liberty and equality had developed through three or four centuries of British history. The British people had fought their own kings and even beheaded one of them for the establishment of a popular form of Government. English literature is full of the spirit of struggle for political liberty. The impact of British history and literature on the Indian mind was to evoke a new sense of patriotism and a new consciousness of human dignity and rights.

This growth of democratic consciousness was further helped by

the substitution of a new in place of the old court language. The change served to place different sections of the people on terms of equality by destroying the privileged position which certain classes had formerly enjoyed. This applied particularly to Moslems who, in the pre-British days, had, for obvious reasons, enjoyed a position of superiority. Their first reaction to English was one of hostility. This was based mainly on a sense of bitterness against the people who had displaced them from the seat of power. The other sections of the Indian community had no such sense of hostility. Even among them, however, the advent of English opened the doors of opportunity to sections which had till then been neglected and backward. By cancelling the advantages which the privileged had enjoyed in the past, English thus made for an equalization of opportunity among different sections of the Indian people.

Prior to the modern age, there were many semi-nationalities in India. The imposition of British rule brought the different semi-nationalities into one political system. The people in the different parts of the country began to realize their unity as a result of the domination of one and the same alien power. The British connexion thus helped to develop a sense of political unity both positively and negatively. Positively it did so through the message of nationalism with which its literature and poetry are instinct. By contrasting the plight of all Indians—irrespective of caste, religion or community—with the privileges enjoyed by the alien British, it rendered the same service in a negative way.

Indian political awakening was one of the main benefits which followed from the study of English. The most important result was, however, a new intellectual awakening of the Indian mind. In ancient days, India had contacts with practically the whole of the then known world. In the Middle Ages, Arabic and Persian served as media of contact with the Islamic world but this entailed a curtailment, if not a suspension, of relations with other regions. By the beginning of the seventeenth century, the initiative in science and technology had, however, passed to the West. Prior to the introduction of the study of English, Indians had no access

to this new source of knowledge and enlightenment. The most important effect of this new knowledge was to disturb the authoritarian attitude and emphasis in Indian life and education. One example of the authoritarian temper of ancient Indian society is seen in the attitude of commentators to revealed texts. Even when a commentator differed in material respects from the interpretation of the original master, he always took special care to insist that the new meaning was not really new, but implied in the old master's statement.

The impact of English education stressed the importance of individual thinking. In the West many thinkers have not hesitated to contradict openly the past masters. Voltaire went to the length of denying even God. Individual patterns of thought have thus received a great impetus from the introduction of the study of English. Such study has also encouraged the development of what may be called the scientific attitude. It has broadened our mental horizon by bringing us into contact with a very different culture and world outlook.

India has in the past hundred years or more produced brilliant men and women not only in the fields of pure and applied science, but also in the allied fields of literature, philosophy and politics. There are vast areas in Asia where the people have the same innate ability or intellectual power as Indians but cannot show any comparable progress. The only explanation of this difference seems to be that people in these regions have not yet acquired to the same extent the spirit of scientific inquiry characteristic of the modern age. The study of English seems to have communicated to Indians something of the quickness of spirit engendered in the British mind since the beginning of the seventeenth century.

In human affairs we hardly ever find any force or factor that is unmixed good or unmixed evil. In spite of these great services which the study of English rendered to the Indian mind, there is another side of the picture which we should not ignore. The first item on this debit side of the balance sheet was the neglect of the study of the mother-tongue and the Indian classics. The increasing preoccupation with English tended to create a gulf between

the newly educated classes and the rest of the people. Those who had received modern education were often alienated from their ancient traditions and at times became frankly contemptuous of it. This weakened the strength of the social fabric and showed itself in various undesirable stresses within the Indian community. The gulf which has grown between the town and the village is only one manifestation of this tendency towards fragmentation.

Another undesirable effect of the emphasis on the study of English was the restriction of opportunity to those who had a high linguistic ability. There is little doubt that for many decades science and technology were neglected in India. This in turn retarded the growth of Indian industry and craftsmanship. The major evil which followed from this undue emphasis was however one which was not necessary. This was not due to the study of English but to its adoption as the medium of instruction. The burden of an alien language hindered the free development of the mind. It made learning largely a matter of memory. Except to a handful of specially gifted pupils, it did not offer full scope to the powers of thought, imagination and feelings. In fact, for a majority of the pupils the medium of instruction often became the end of education.

The preoccupation with the study of English had one other undesirable feature. It has been indicated earlier that during the Middle Ages India's contacts with the rest of the world had suffered as a result of her preoccupation with the study of Arabic and Persian. In the modern period, English also has had a similar effect. Indians have tended to look at the world through English spectacles. While India's contact with the immense and rich literature of England has been all for the good, the diversion of interest from oriental and other European literatures has at times given to Indians a slightly one-sided view of the world. One of the foremost tasks of Indian education after attainment of independence has been the effort to correct this tendency.

On the balance, however, the study of English has been a factor for the progress and advancement of the Indian people. We must not forget that the British Government of the day was not at first

in favour of introducing Western studies in the country. For a long time the East India Company was concerned only with the making of profits. When it assumed some of the responsibilities of administration it was in the beginning in favour of encouraging only oriental studies. European missionaries had no doubt been in favour of Western education from the very outset, but perhaps the decisive factor was the influence of a handful of enlightened Indians led by Raja Ram Mohan Roy, who felt that contact with European science and knowledge would help to bring about an Indian renaissance.

Whatever may have been the case in the past when it was imposed, there are today several major considerations for its continuation in free India. Firstly English is today one of the major vehicles of the culture of the modern world. Discontinuation of its study may therefore result in dissociating India from the progressive forces operating in history. A second consideration is the growing complexity of internal life within each nation. This demands that the various component units must have far greater resilience and flexibility than was needed in the past. Contact with English has served as a catalytic agent for bringing about many desirable social changes within the Indian nation. One need not elaborate the point, as it is seen in almost every aspect of our daily life. A third factor for the continuation of English is the growing inter-relations between different nations and regions. Each nation must learn to move outside its own narrow orbit and establish channels of communication with others. There is perhaps in the present world no better means of such communication than English.

III

To argue in defence of English does not however mean that its study need or can be maintained in the form that it has had in the last 100 or 150 years. The first contact with English about a hundred and fifty years ago dazzled the minds of a section of the Indian people. It swept them off their feet to such an extent that some of them sought to give up their own language and culture.

There were many talented men and women who at that stage prided in the fact that they could speak English better than their mother-tongue. It was inevitable that there should be a reaction to such excess. We find that today there are groups who go to the other extreme and would seek to banish English from the Indian scene. They however forget that the processes of history cannot be reversed. English and the modern system of education may have been alien when they were first introduced in India. A century or more of association has today made them a part of the Indian heritage. Even if we banish English from our life, traces of its influence would remain and show in a hundred ways.

We may however distinguish between the different uses of English in the modern Indian context. For the vast majority of people who have not so far studied English, there need be no question of their studying it in the future. Even they have however felt its impact indirectly through reading books in Indian languages produced under its inspiration. This process will continue and perhaps be expanded with the growth and development of the various Indian languages.

There is a second group of Indians who want to use English as an instrument of communication with others at the level of ordinary intercourse. There will no doubt be different gradations in such use. Some will be content to have only a rudimentary knowledge of the language and use it for the basic necessities of communication with other people. Others will use it as a means of communication for more complicated purposes, at the level of trade, commerce, industry or even political relations with other countries and in the international field. For all of them, the chief value of English will be functional. Their main emphasis will be on the use of the language as a medium of communication rather than a vehicle of culture.

There will however be a third group, necessarily much smaller in number, who will seek to use the language not merely as a means of communication like the second group, but as a medium through which they derive sustenance from the culture of the West. Here, also, there will be gradations. Some would be con-

tent with enough acquaintance to appreciate the beauties of its literature. Others would use it to derive knowledge of intricate and highly specialized fields in science, philosophy or other intellectual disciplines. There may however be a small minority who will seek to go still further and use the language creatively.

If this attitude towards English is accepted, it would follow that the study of English would not be necessary for the vast majority of the Indian people. This would mean no change, for they do not do so even today. One may express the same fact in a different form. Perhaps 80 per cent of the people in any country spend their lives within a circle of ten or fifteen miles radius with their village as its centre. Such people are not concerned with the affairs of the outside world and are content to lead their life in traditional ways. They neither seek nor require knowledge of a foreign language. India is no exception. For 80 per cent of the Indian people, English would therefore have hardly any utility. In fact, the only language which concerns them is their mother-tongue. They must however have the opportunity, if they so desire, to study English or in fact any other subject on terms of equality with any other citizen. Since no one in the modern world lives an entirely isolated life, they also must develop the resilience necessary to receive stimuli from outside. The enrichment of their mother-tongue would therefore be a necessary condition for their satisfactory functioning as citizens in a free and republican India.

There would be a much smaller group, though they may number millions, whose field of interest and activity will go outside this narrow circle and cover their entire State, or in some cases the whole of India. Since the consciousness of Indian unity is largely a result of the development of modern education it would be desirable for this group to have access to a functional use of English. This will also be necessary from the point of view of appreciating the impact on Indian life of forces from without. Finally, there would be the small group who would operate on an all-India level and supply the leadership in India's dealings with foreign countries. In their case, acquaintance with English will

be not only desirable but necessary. One of the reasons for India's present prestige in the international world is the clarity of enunciation of her policies. There is little doubt that much of this clarity is due to Indians' command over the English language. It would be unfortunate if this advantage were frittered away.

One may therefore say that the study of English may be ruled out from elementary education in India, but it must retain a place in our systems of secondary education. Even there, it must no longer claim its former pride of place. There was a time when the quality of a man was decided by the quality of his English. This must cease. We must also be prepared for a reduction in the number of school hours per year and also the number of years which can be devoted to the study of the language. It will also mean a shift in the attitude towards English. Till now, it has often been studied as a literature even at the level of the secondary school. This has often had unhappy results. Young children have been expected to study things of which they have no experience. One example may suffice to show the ridiculous lengths to which such practices at times went. Herrick's poem on the daffodils may be a lovely piece, but to an Indian village boy who has never seen the flower and has no idea of snow or ice, the poem can have very little significance. All that he can do is to memorize the poem and learn it as a string of words which could be brought out on suitable occasions to satisfy the examiner. We must therefore re-model our courses of English at the secondary stage and recognize that the learning of English is not an end in itself but only the acquisition of an instrument for adding to our knowledge. The emphasis must therefore shift from literature to the simple language of every day.

Such a change in attitude towards English is also necessary in view of the linguistic situation in India. Today an Indian child in the secondary school is expected to read his mother-tongue and, in addition to it, Hindi, which is the official language of the Union. Beside a third language in English, many expect him to study a classical language. A child at a fairly early age is thus expected to study simultaneously four languages. Still worse is the plight of

the child whose mother tongue is different from the regional or the State language. He would be burdened with one language in addition to the other four. If a child is required to learn five languages before he has finished school, one may very well ask what time he can have to learn subjects other than languages.

Such a situation would be intolerable if the child had to study the literature of all these languages. If however with the exception of the mother tongue the aim at the secondary stage is to learn these languages as a means of ordinary communication, the criticism will lose much of its force. In fact it may help the young child to develop his powers of communication if he is taught the languages side by side. It is also for consideration whether English cannot to a large extent take the place which formerly the study of the classics occupied in the school curriculum. New languages have developed through their contact with established languages. This was one of the main reasons for the emphasis on the classics. The great progress made in recent years by a number of Indian languages owes its impetus directly to the impact of English. If we are careful that English does not become a burden on the growing child, his contacts with English may help to foster in him a sense of language. In course of time this may enable him to work creatively with his own language and develop science and literature suited to the modern age.

One thing however is certain. If English is to be one among several languages that are studied at the school level, it is unavoidable that the number of hours devoted to English will have to be reduced. Normally this would lead to a deterioration in the standard of English attained by our pupils. The standard is not too high even today and there is hardly any margin for lowering it further. We must therefore take special measures to guard against such a possibility. A reform which requires immediate attention is to change the methods for teaching English now adopted in most training colleges. These are based on the practice of British schools and ignore the obvious fact that for British children English is the mother tongue while for Indian children it is a foreign language. The methods followed in Britain for teaching

English can be more fittingly applied to the teaching of Indian languages to Indian children. If we are to profit by European experience, we can do so by adapting the methods used in Britain for teaching French or German or the devices used on the Continent for teaching English. The Scandinavian countries in particular have developed a very efficient technique for the teaching of English. We can also profit by the experience of the United States of America during the Second World War. Large numbers of foreign nationals had to be taught English within a short period. Special methods were devised for the purpose and achieved considerable success. With better methods of training and, particularly, the use of techniques developed during the war years, English can perhaps be taught more effectively in a shorter period than has been the case till now.

One other factor would help in this direction. Experience suggests that if a person has a good grounding in one language, it helps him to acquire a working knowledge of another in a shorter time. In the past, our secondary school pupils began the study of English before they had established linguistic habits in their own language. In future, secondary school pupils will have a greater command over their own language when they first take to the study of English. These two factors—improved methods and a greater initial linguistic competence in one's own language—ought to enable us to overcome largely the difficulty which would otherwise be created by a shorter period of study of English.

The study of English at the secondary level must be essentially that of English as a language. This does not mean that the subject-matter of study must be denuded of all human interest. In fact, the best way of learning a language is to make the lessons a source of enjoyment. Literary pieces must therefore find some place even in the school curriculum, but we have to be careful that such pieces are within the range of experience of those for whom they are intended. We may perhaps adopt one of the recommendations which a recent conference of Professors of English in Indian universities made. They held that at the school level, there should be detailed study of only texts of simple modern English prose.

These may be written within a vocabulary of about 2,500 essential words. This should however be supplemented by a rapid reading of select books of prose and verse of literary quality.

If we are to draw upon the resources of English for enriching our culture and developing the wealth of our own languages, there must be a minority who should be prepared to study English both as a language and a literature. For such students, the study will be its own reward. English possesses an imaginative literature which has few equals in the world. In the fields of drama, lyric, poetry and belles-lettres, English has an immense wealth of achievement. In the field of fiction, short story and the serious essay, English has a literature which can bear comparison with most languages of the world. To the serious student of English language and literature, such study will open out a new world and serve as a source of inspiration which may enable him to create works of beauty in his own language.

In this connexion, it is interesting to note that all the great writers in modern India have felt the impact of English. It is not necessary to make special mention of writers like Pandit Jawaharlal Nehru, Sri Aurobindo or Professor Radhakrishnan, who have used English as the main vehicle of their writing. Even those who have written mainly in an Indian language have often done so under the influence of English. Starting from Raja Ram Mohan Roy, we have in Bengal a galaxy of writers from Michael Madhusudan Dutt to Tagore who derived much of their inspiration from their study of English literature. It gave to their minds a quality which enabled them to create literature of the highest order in their own language. The creator of modern Gujarati prose was Mahatma Gandhi who was likewise a master of English style. Even a writer like Maulana Azad who has received no formal schooling in English has studied it on his own and been deeply influenced by its impact on his mind. This process is continuing. In fact, extended contacts with English and other European languages are leading to many new and interesting developments in Indian literature.

Apart from the impact of its creative literature, English also

offers to us the distilled essence of modern knowledge in all fields of human activity. In the world of natural sciences, of philosophy, economics and other social sciences, in anthropology and in history, English has not only a literature of immense richness but is also the repository of most of the worthwhile literatures written in other languages. It therefore gives us a cross-section of the mind of the modern world. It is from this point of view that the study of English has a special significance in our academic and intellectual life.

There is another consideration which has a decisive importance. In a fast contracting world, the role of a country will depend on the state of its technology and science. In fact, any shortcoming in either field would threaten the prosperity, if not the survival of a State. Contact with the latest developments in science and technology determines not only the industrial prosperity and economic well being but also the political and military strength of a nation. Even States which have no aggressive intentions must have the necessary means of self-defence. If India is to keep abreast of the world in science and technology, and make an independent and characteristic contribution to world civilization and culture, she cannot afford to give up her command of English. It may have been an accident of history, or even a political misfortune that brought English to India, but once it came, it has proved a source of blessing to the people. As an instrument for the maintenance of her new-found independence and nationhood, India will therefore have to retain English as an important, one may almost say an indispensable subject of study.

In the ultimate analysis, the study of English is an instrument for the development of the modern outlook. It has brought the Indian mind into contact with the questioning, sceptical and experimental attitude of the modern age. The value of this association cannot be placed too high. In the past, Indians have at times shown a tendency to place greater emphasis on authority and conservatism than on experiment and innovation. It is therefore of special value that we retain our contact with a language whose outlook is essentially experimental and which is helpful in correct-

ing the conservative cast of our mind. The quickening of consciousness which has taken place in the last 150 years was not an accident, but the result of the impact of a new way of life upon our traditional outlook.

Carlyle once said that if he was asked to choose between the British Empire and Shakespeare, he would without a moment's hesitation choose Shakespeare. This will appear surprising only to those who do not understand Carlyle's meaning. The British Empire will, like other Empires, have its day of glory and then fade, but the world created by Shakespeare will survive and be a cherished possession of the human mind. In preferring Shakespeare to the British Empire, Carlyle was therefore laying claim to a loyalty which can defy the ravages of time. There is no difficulty for a man of another race, country or language to owe this loyalty to Shakespeare's English for in the realm of the spirit, there is neither ruler nor ruled, neither master nor slave but only fellow-workers in the realization of common human values.

February, 1955

CULTURAL ACTIVITIES AND THE STATE

THE silent revolution which has been taking place in India for the last hundred years or more culminated in the achievement of political independence. The whole of this period has been characterized by unrest and ferment. Sometimes, the new awakening has found expression in mere revolt against all accepted standards. Sometimes, it has expressed itself in works of art or movements of religious or social reform. Common to all manifestations has been a spirit of inquiry, if not revolt. Such discontent is in itself evidence that a new birth was taking place. Stars must collide and break into fragments before a new sun can be born.

Everywhere in India there is social turmoil and unrest. Is it then surprising that in the world of art there should be experiment and endeavour rather than expression and achievement? The emphasis on individualism has, for various reasons, been one of the governing factors in recent Indian life. Such emphasis tends to loosen social bonds. Customs and traditions act as a cement which bind together the community. One condition for social integration is the surrender of the individual to the purposes of the social group. When the individual exalts himself above society, old social patterns begin to crumble. This is the process which started in India in the latter half of the last century and is proceeding with accelerated pace after the achievement of freedom.

A curious reflex of this process of social disintegration is at times seen in a sudden efflorescence of some of the arts, notably painting and literature. Contrarily, such social disintegration leads to a failure in the achievement of dramatic or architectural expression and one may add, of philosophic insight.

Poetry and painting are essentially the expression of individuality. To call them general or commonplace is their final condemnation. Architecture and only to a slighter extent, drama, are on

the other hand almost wholly dependent on a social feeling for beauty. The poet can launch into individual voyages after the ideal. The painter may also achieve perfection in isolation. Music may transcend the individual but has its origin in individual ecstasy. Architecture must depend on social factors at every stage. Only the co-operative endeavour of many can build up great architectural monuments. Not only the master builder but all his associates must have a feeling for craftsmanship. With minor modifications the remark holds equally for the theatre. It is therefore not surprising that modern India has made remarkable experiments in poetry, painting and music but almost none in architecture or drama.

The process of ferment and unrest has, if anything, been enhanced since the achievement of independence. The stirring of the spirit which brought about independence has not yet ceased. New equilibria, whether in the political, the economic or the social field, have not yet been established. In consequence the art of independent India in the field of painting, poetry and music is a continuation of what was happening in pre-independence India. There are the same signs of a newly-awakening energy, but as yet there has not been sufficient consolidation of new gains to serve as the starting-point of a new period of achievement.

The national victory was the result of a long and arduous struggle. There is nothing surprising in this for nature hardly ever knows a new beginning. Even when there seem to be violent breaks from the past, we can, if we are careful enough, trace the continuation of many of the tendencies and forces which operated before the apparent break. Revolutions are in fact accelerated and telescoped phases of a long evolutionary process. All the great political revolutions testify to the truth of this statement. The character of a revolution and the course of events that follow it depend in each case on the nature, traditions and history of the people concerned.

This law of continuity holds even more completely in the field of man's cultural activities. A culture is the quintessence of a people's history. Long periods of experience have been distilled

into the forms and traditions which together constitute culture. A complete break in a cultural pattern is, therefore, unusual, and where it takes place, generally disastrous for the people concerned. Where an old culture is confronted by an entirely different pattern, and goes down under the impact, the people also disintegrate. Herein lies the explanation of the decay of many primitive peoples, when faced with the civilization of modern Europe. The continuity of cultural tradition is an essential condition for the survival of a nation.

To expect that the establishment of the Indian Republic would mark an entirely new beginning in the different fields of Indian culture, would, therefore, be unjustified. The achievement of the Republic was itself made possible by a cultural reawakening of the people extending over many decades. There is hardly room for doubt that political subjugation is only one manifestation of a national weakening of character of which other effects show in a decadence of the arts, sciences and philosophy. When the reawakening of a nation starts, the new spirit reveals itself, not only in a struggle for political emancipation, but also in an urge for more complete expression in the different fields of culture.

In India it is noteworthy that all the great workers in the political field have been simultaneously pioneers in the field of cultural renaissance. Raja Ram Mohan Roy was not only one of the first political leaders of India, but he was the creator of Bengali prose, and a pioneer of educational reconstruction and women's emancipation movements. Rabindranath Tagore was not only a great poet and artist, he was also one of the first who realized that political freedom can come only through the rebuilding of national character and the reconstruction of our village life. Mahatma Gandhi was a supreme architect of Indian freedom, and simultaneously the creator of modern Gujarati prose. He was also largely responsible for the new recognition of the dignity of all the Indian languages. Among living leaders of resurgent India, Pandit Jawaharlal Nehru and Maulana Abul Kalam Azad have not only been intrepid fighters for freedom, but also rank in the forefront of our creative writers.

II

An account of cultural activity since the attainment of independence can, therefore, only be the continuation of a story which began many decades ago. In pre-independence days, such activities were mainly the concern of interested individuals and groups. The one remarkable change is the degree and extent of State recognition and assistance extended to such activities since independence. As already indicated, India had great writers, artists, musicians and scientists even before she became free. There was not, however, an adequate organized effort on the part of the State to encourage such activities. It is true that from time to time high dignitaries of the State took interest in the artistic, philosophical or scientific achievements of Indians, but the interest was generally on a personal level. The State as such remained immune from contact with art.

In recent years, there has been increasing recognition that it is one of the duties of the State to foster cultural activities of various types. In many modern states, the Ministry of Education, in addition to purely pedagogical and instructional duties is charged with the promotion and development of the cultural life of the community. This is as it should be. Education in its true sense must include the various human manifestations expressed in art and other cultural forms. If education is a drawing out of what is inherent in man it is inevitable that such a process must go beyond the narrow limits of exchange of information in a classroom. In fact, experience has shown that even pure instruction is more fruitful and effective if it is linked up with these wider aspects of the personality. That is why it is generally recognized today that Art is not an embellishment but an essential element in the educational development of children. Children develop most quickly if they are offered the opportunity of spontaneous self-expression, and what is this if not art in its rudimentary form?

It was, therefore, in the fitness of things that when the Department of Education (now Ministry of Education) was organized as a separate unit of the Government of India, it should be described

as the Department of Education and Art. For reasons into which we need not enter, pre-independent India did not offer much scope for the development of art and cultural activities alongside with formal instruction. Those who were attracted by art often moved out of the general educational stream, while the majority who followed general education paid little attention to art. There is little doubt that much of the malaise of the younger generations is due to this neglect of the emotional and aesthetic side of their life in traditional educational practice.

Nonetheless, the need for art received some recognition in the post-war educational development plans drawn up during the closing years of the last World War. The Royal Asiatic Society of Bengal proposed that the Government of India should establish a Cultural Trust to foster and develop different aspects of the cultural life of India. The proposal was accepted in principle, and a scheme drawn up to establish three Academies of (i) Letters, (ii) Visual Arts, and (iii) Drama, Dance and Music. As activities in the sphere of culture require a quick and sensitive response, the framers of the scheme proposed that the Trust should be an autonomous body with independent funds of its own.

Apart from these general plans, it must be confessed that not much had been done for the promotion of art or other cultural activities in pre-independent India. It is true that some art schools had been established in important centres like Calcutta, Madras, Bombay or Lucknow, but there is no gainsaying that art was looked upon as the Cinderella of the educational world. The status of music, dance and drama was if anything even less satisfactory. Society often frowned on practitioners of these arts and the State was at best indifferent. That the fine arts did not disintegrate was due to the devotion of a handful of artists and their faithful patrons.

A culture flourishes best in an atmosphere of free give and take with other cultural patterns. Unfortunately for India, she had lost her age-long contacts with some of her immediate neighbours after the advent of the British. Tagore sought to broaden India's relations with the world and acted as her non-official Ambassador

long before India became free. His visits to countries of Europe, America, South America, South-East Asia, Japan, China, Iran and Soviet Russia, were almost like triumphant tours. His visits led to a re-establishment of contacts, but since they owed their origin to his personality, the danger was that the contacts might again be lost with his death. Pandit Jawaharlal Nehru round about the thirties toured extensively in Europe, and this also had the effect of making these countries conscious of India. The work of J. C. Bose, C. V. Raman, M. N. Saha and other scientists contributed to the awakening of interest in India in foreign countries. Professor Radhakrishnan's reinterpretation of Indian thought attracted attention in learned circles throughout the world while Sri Aurobindo had a small but influential circle of admirers in most Western countries. Last but not least, the impact of Mahatma Gandhi's personality on the modern world deeply stirred the conscience of man, and led to a growing awareness of the value of India's culture for the regeneration of the world.

Nevertheless, it must be admitted that interest in India was, till the attainment of freedom, sporadic and faint. With the emergence of free India, the world suddenly recognized that here was a country which had not only achieved its freedom, but had achieved it in a cultured and civilized way that has perhaps no parallel in human history. The Government of independent India also recognized that its contributions to the world would have to be mainly in the fields of culture and ethics. For the first time in many centuries, India as a State started taking an active interest in the promotion of art and cultural activities, not only within the country but also abroad.

III

The present study can give only a very brief report on some of the things which the Government of India and the State Governments have been trying to do since India became free. We may perhaps mention first the setting up of a National Commission for Co-operation with U.N.E.S.C.O. The foundation of U.N.E.S.C.O. was laid during the war-torn years by men of

vision and goodwill who recognized that there can be no hope of permanent peace unless the suspicion, hatred and jealousy which divide nations are eliminated. The Constitution of U.N.E.S.C.O. in its preamble rightly states that since all wars begin in the minds of men, it is in the minds of men that the bastions of peace must be built. U.N.E.S.C.O. also recognizes that the creation of understanding and goodwill among nations cannot be left only to Governments. Governments are the organized instruments of society and deal with political questions where differences are often inevitable. U.N.E.S.C.O. therefore lays it down that each participating country must set up a non-official National Commission to create better understanding and goodwill with individuals of other nations. Free from the limitations which political considerations always impose, such Commissions may have a better chance of establishing closer contacts than governmental agencies.

India is a founder-member of U.N.E.S.C.O., and has from the very beginning accepted wholeheartedly its objectives. With a view to fulfilment of these objectives, the Government of India set up in 1949 an interim National Commission which was later put on a permanent basis in 1953. The permanent National Commission held its first conference in January 1954 which was inaugurated by India's Prime Minister and attended by fraternal delegates from many Asian and African countries. In fact it became almost a regional conference of U.N.E.S.C.O. and was perhaps the first occasion when a National Commission had taken the initiative in organizing such an assembly. The Commission works both directly and also through sister organizations devoted specifically to the furtherance of education, science and culture. The machinery set up for purposes of advancing the cause of science and education need not be described in detail as they form part of the general story of Indian education. Some account may, however, be given of the machinery set up for advancing cultural activities.

Reference has already been made to the scheme sponsored by the Asiatic Society of Bengal to establish a Cultural Trust work-

ing through three Academies to foster the development of language and literature, music, drama and dancing, painting architecture and other visual arts. The proposals of the Society in this behalf were further considered in a series of conferences with well-known representatives of the various arts. These Conferences recommended measures for the preservation and enrichment of existing traditions and the encouragement of experiment and innovation in accordance with the spirit of the new age. Three National Academies have now been set up as autonomous bodies and are charged with the task of maintaining and improving standards and fostering the growth of new developments.

A great deal of promising work has been done since 1947 in the expansion of cultural relations with foreign countries. For various reasons, pre-independence India had few contacts with countries of Asia and Africa. Her contacts with Western countries were also heavily weighted in favour of the United Kingdom. It was felt that the first step must be to restore age-old relations with her immediate neighbours. The visit of an Iranian goodwill mission in the last years of the Second World War led to the establishment of a small Indo-Iranian Culture Committee in Delhi. With the attainment of independence, it was felt that the scope and functions of the Committee should be expanded to promote cultural relations not only with Iran but with all India's neighbours. The Indian Council for Cultural Relations was accordingly set up as an independent and autonomous body. Inaugurating the Council the Prime Minister welcomed its establishment as an augury for closer contacts in the field of culture between India and other countries of the world. The Council is divided into sections of which one deals with countries of the Middle East and Turkey, another with south and east Asia and a third with countries of Africa. It is proposed that in course of time other sections will be opened to further relations with countries of Europe and America.

The Council has undertaken various kinds of activities of which only a few more prominent ones may be mentioned here. It has set up a library and reading room and is assisting in the publication

of magazines and other cultural material. It has arranged for the exchange of professors and other men of learning and helped troupes of artists to undertake cultural tours.

Apart from the work of the Council, free India has sought to extend her cultural contacts in other ways. Scholars and learned men have been sent to and received from U.S.A., U.K., China, Iran, Afghanistan, Australia, Turkey, Japan, U.S.S.R. and some countries of Africa. India has arranged to provide teachers to countries like Tasmania, Zanzibar, Afghanistan, Malaya, Ethiopia and Sudan. Books on Indian culture and history have been presented to selected libraries in various countries. Some libraries in India are maintaining a collection of the publications of the United Nations and its specialized Agencies. India has also entered into agreements with the Governments of the United States and the United Kingdom for exchange of all official publications.

The free flow of students and scholars between different countries is one of the best methods of promoting cultural contacts and international good relations. India has arranged for a large number of such exchange scholarships and fellowships. In terms of the scheme known as the Fulbright Programme, a large number of American and Indian teachers and students have been exchanged during the last five years. The British Council has helped to organize similar programmes in respect of the United Kingdom. Fellowships on an exchange basis with France, Egypt, Italy, Iran, Germany, Yugoslavia and China have also been instituted. A comprehensive scheme of cultural scholarships embracing large regions of Asia and Africa and some of the territories where Indians have settled as colonists has also been in operation for several years.

India has in recent years sent abroad archaeological missions to Iran, Afghanistan and Indonesia. India also organized, with the help of various non-official bodies, exhibitions of Indian art in many countries of the world. She has also received official or non-official exhibitions from the U.S.A., the U.S.S.R., China, France, Indonesia and other countries. U.N.E.S.C.O. exhibitions of some of the masterpieces of modern European art have been shown in

different cities of India. Special mention may be made of exhibits of children's art sent to international exhibitions in different countries like America, Australia and Germany and the International Exhibitions of Children's Art organized every year at New Delhi by *Shankar's Weekly*.

The Royal Academy of London had organized just on the eve of independence perhaps the greatest exhibition of Indian art ever held. It was a vivid demonstration of the development of Indian art through five millenniums. The generous co-operation of museums and private as well as princely collectors in all the territories that comprised undivided India made this exhibition unique. It was felt that, before dispersal, the exhibition should be shown in Delhi as well. The success of the exhibition encouraged the idea of using it as the nucleus of the proposed National Museum. Till the Museum constructs its own buildings, some of the exhibits have been housed in the President's House. In order to make the Museum fully representative, the Government is taking steps to make an inventory of valuable objects of Indian art in foreign countries. It is proposed to acquire as many originals as possible and, where originals are not available, to secure copies executed by competent experts. Legislation has been enacted to prevent the indiscriminate export of valuable objects of art from the country. The foundation of the Museum's permanent house has recently been laid. A gallery of modern Indian art has been housed in what was formerly Jaipur House and collections are gradually being built up. In co-operation with some of the State Governments a permanent fund has been set up for the purchase of important art objects.

Special mention may also be made of a comprehensive history of world philosophy published under the auspices of the Government of India. Till now such histories have dealt with the philosophy of only a country or region. Histories of Western philosophy have sometimes referred to Indian or Arab philosophy. Similarly histories of Indian philosophy have made references to philosophy elsewhere, but as yet there has been no comprehensive account of the development of human thought in different

countries and different ages. Such a study is important at any time but in the modern age—when different peoples and different cultures have been brought into close proximity—the need for such study to facilitate mutual understanding among nations has acquired special urgency. One of the first tasks of the Ministry of Education was therefore the preparation and publication of a *History of Philosophy Eastern and Western* with the co-operation of some sixty scholars from various countries of the world.

IV

It is, of course, obvious that a Government as such cannot create great works of art. Some have held that it cannot even promote the growth of art as State patronage may give a wrong direction to the art activities of a people. It is to guard against such dangers that India set up the three National Academies with members drawn largely from practising artists in the various fields. Nevertheless, there is no denying that the State can and ought to help in the development of art by creating the right atmosphere of encouragement and support. This has become the more necessary in a democracy. In the past moneyed men—whether they derived their wealth from agriculture or industry—could serve as patrons of art. In a country moving towards egalitarianism, these privileged classes have either disappeared or are disappearing and the State must take their place.

The Government of India made a new departure when it decided to encourage young artists by providing them with scholarships which would keep them above want for one or more years and leave them free to develop their art. Under another scheme, artists of established reputation have been given grants to enable them to make a survey of different forms of art and collect specimens of types that are decaying through the lack of patronage. After the establishment of the National Academy, steps have been taken for the publication of albums, portfolios and picture postcards in order to popularize art among the people. Periodical exhibitions are being organized on an increasing scale to provide encouragement and support to young artists. Mention may

also be made of a system of pensions to old artists who have achieved distinction in the past and are now in indigent circumstances.

The Academy of Letters is seeking to render the same services to men of letters. It has undertaken the task of preparing a national bibliography. It is helping in the production of a standard edition of the works of *Kalidasa*, perhaps the greatest poet of ancient India. It has also decided to bring out selections of the best writings in each modern Indian language and arrange for their translation into other languages to build up a common literary heritage for the whole country.

In the realm of music, the time has come for a revaluation of our past achievements. The urge towards experiment is not so pronounced among musicians, but a beginning has been made in an attempt to provide orchestration and new concocts. Indian music has for ages rested upon its laurels. There have no doubt been musical innovators who sought to add new elements. One can think of *Amit Khustoe*, *Tansen* or *Suradas*, or in more recent times, *Tagore*. The main contours of Indian music have, however, remained unchanged for almost half a millennium.

Today, apart from the isolated efforts of individuals and groups, the Government is seeking to further new developments in Indian music by creating conditions where different recognized schools can work in co-operation and evolve new styles. It is well known that Indian music has developed along parallel lines in the north and the south. It is proposed that under the general auspices of the National Academy, regional academies may be set up to study the schools developed in different regions. The Hindustani Music Academy in Lucknow and the Karnatak School of Music in the south will thus be used as repositories of ancient traditions. They are also intended to be the trying grounds of new experiments in musical effort. One interesting development which has followed immediately after the establishment of the Hindustani Academy is the attempt to utilize music for purposes of educating the emotions. The object is to find out what effect different notes, tunes and harmonies have on the mind of the child. Once results

have been achieved, the knowledge can be applied to transform the normal curricula of schools.

India has a tradition of indigenous dance that extends over the centuries. After the advent of the British, there was a danger of the tradition dying out. For many decades, the art of dance was confined only to some professional dancers whose status in society was low. In the thirties of the present century, a renaissance began under the inspiration of Tagore. He revived many old forms and made dancing once more respectable. Udayshankar may also be mentioned in this connexion as one who did much to restore the prestige of Indian dance in foreign countries. Since independence, there has been a strong revival in the interest in different forms of dance. Government of India has initiated action for the collection of representative folk dance and music for introduction into schools, as it is felt that this is the best way of ensuring the continuity of this vital form of art.

In the field of letters, there is a spate of writing in all the Indian languages. All are characterized by questioning and unrest. Old literary forms are being tested against the requirements of the present and often attacked for their inadequacy. There are also efforts to experiment with the texture of language itself. In Bengal, one notices the two extreme tendencies of modernity and conservatism struggling for supremacy. Similar processes can be discerned in the growing literatures of the other languages. One welcome feature is the tendency to enlarge contacts between the different language groups through translation of one another's works. Here also, a national government can and is attempting to render greater help than was possible in the past. As already indicated, both the National Commission for U.N.E.S.C.O. and the Academy of Letters have recognized this as one of their main functions.

New encyclopaedias are under preparation which seek to bring modern knowledge to the common man in his own mother-tongue. The Tamil Academy has undertaken the production of a Tamil encyclopaedia. The Telegu Academy is co-operating with it for the preparation of a similar encyclopaedia in Telegu.

Parallel programmes are at work in Maharashtra Bengal and elsewhere. The Government of India has also decided to bring out an encyclopaedia in Hindi which would help to make modern knowledge available to the people in a simple and accessible form and provide the basis for the preparation of similar encyclopaedias in other Indian languages. Special mention may also be made of a popular encyclopaedia prepared to meet the needs of the neo-literate adult.

V

India's resurgence of spirit is expressing itself in many fields. A great impetus to the development of indigenous languages has been given by the decision to employ them as State languages. Recognition of important literary figures by the Central and the States Governments has also contributed to the same end. Attempts are also being made to bring the wealth and variety of literature in different languages to the notice of people in different regions of the country. Outstanding musicians have been honoured by the institution of special awards. Similar awards are being introduced for drama sculpture and architecture. The Government's policy of encouraging young artists by the grant of scholarships has had a good response. The number of exhibitions held in the country has increased considerably and some of these have been one-man shows. The Government's policy of selective purchase for the National Gallery has also been an encouragement to many artists. The interest of foreigners in all aspects of Indian art and culture has shown a marked increase.

Even a cursory survey like the present however shows that there is more endeavour and experiment than achievement. Nor is this surprising. A great artistic effort can spring only from a civilization which has achieved internal equilibrium. India is today in the process of reconstruction and synthesis. Till that synthesis has been achieved, experiments in the fields of the different arts must remain gropings after an unattained and imperfectly realized ideal rather than a sure march to a predestined goal.

The bases of success here, as elsewhere are a critical spirit and

integrity of character. Indian history has often been a tragedy because the people have lacked a critical and inquiring mind. Institutions which were useful two thousand years ago have been allowed to continue simply because no one questioned their utility. Indian household utensils remain almost unchanged from the days of Mohenjodaro. The methods of cooking, the houses and the clothes do not show symptoms of that inventiveness which is the essence of a quick, vital and questing spirit.

It is yet too early to judge what effect the achievement of independence has had on the quality of work of our artists and litterateurs. One thing alone is certain. The achievement of independence has removed many old inhibitions and created conditions for a freer and fuller expression of latent abilities. The experience of other countries shows that whenever old barriers are removed and there is a liberation of man's energies, it is followed by a tremendous upsurge of the spirit which finds expression in all forms of creative activity. There is no reason why the same experience should not be repeated in India. And when this happens in India, the results are likely to be far reaching. With her ancient traditions and the immense resources of her past culture, such an efflorescence in India will contribute greatly to the enrichment of the heritage, not only of Indians, but of the whole of humanity.

March 1955.

STUDENT INDISCIPLINE

THERE have recently been some instances of grave indiscipline among students that have attracted the attention of national leaders as well as educationists at all levels. In some cases things have gone so far that teachers in schools or invigilators in examinations have been attacked. In others, there have been clashes with the police or sections of the public. Apart from such extreme examples of indiscipline, there has been a spirit of general turbulence and rebellion among large sections of the younger generation. Some of it is no doubt part of a general sense of unrest throughout the world due to the destruction of old and the failure so far to create a new set of values. There are, however, some special factors in India which contribute to students' dissatisfaction and indiscipline in the country. While the present situation rightly causes concern, the situation is not beyond control and effective measures can restore a more normal attitude among students and the younger generation. On the other hand failure to take effective steps at this stage can so aggravate the problem that it may shake the very foundations of our national life.

I

It is obvious that before we can adopt effective measures there must be a correct appraisal of the situation and clear definition of the causes which create the present unrest. An analysis of all the causes would require a volume but some of the factors which deserve special mention may be briefly indicated here.

A The loss of leadership by teachers

The first and foremost cause of the present state of unrest among students is to be found in the role the teachers play. Where there

is effective leadership by teachers, there can be no problem of indiscipline among students. Unfortunately, teachers today do not command the respect and affection of their pupils to the extent they did in the past. For this they alone are not to blame. The major factors which have led to the loss of leadership by teachers may be briefly described as follows:

(a) With the steady growth in political consciousness since 1920, students were also drawn into the political struggle. They did not consistently or continuously participate in struggles, but a general temper of revolt against political servitude and a desire to struggle for national liberation became widespread. The personality of Mahatma Gandhi, Mr. C. R. Das, Pandit Jawaharlal Nehru, Maulana Abul Kalam Azad, Mr. Subhas Chandra Bose and others also powerfully affected the imagination of young students. Teachers for various reasons were not able to take an active part in the political struggle and to some extent lost the respect and esteem of their pupils.

(b) There has been unceasing and at times sweeping criticism of the prevailing system of education for the last thirty years. From criticism to condemnation is but one step. And the condemnation has extended to the teacher as well. This has shaken the confidence and morale of teachers and induced in the minds of the public a loss of respect for the profession. It has also created among students a disrespect for both the system and the teachers and prevented them from utilizing it for what it is worth.

(c) During this period, the teacher has also been continually losing in social status partly for the reasons mentioned above but mostly because of the fact that teachers belong to a lower income level. Thirty or forty years ago, few Indians had the prospect of high Government office. Openings in industry and commerce were also limited. As avenues in other directions opened, a situation developed where mainly the rejects from other professions turned to teaching.

(d) The general desire for more lucrative posts has been reinforced by the difficulties created by war-time and post-war inflation. The salaries of teachers which were in any case

unsatisfactory have now become inadequate even for bare subsistence. Teachers were forced to look for subsidiary income, particularly in the bigger cities. Many old teachers were forced to leave the profession, while young men were loth to become teachers. The result is that teachers today are not only economically poor but often frustrated and bitter men. This not only detracts from their position in society but makes them positive sources of danger to the community.

(e) The entirely justified demand for expansion of facilities in education has also contributed to a lowering of the prestige of the teacher in two ways. On the one hand the low income and the demand for a larger number of teachers threw the profession open to people who were not qualified. On the other the disproportionately large increase in the number of students meant that personal contacts between the teacher and the taught were lost. In the past, such contact enabled teachers to win the loyalty and in many cases the affection of their pupils by their qualities of scholarship and/or character. In the new situation unqualified teachers with little opportunity of personal contact with pupils cannot win the respect of their pupils in either of these ways.

(f) The teacher has little control over even educational issues. The universities, colleges and schools are often controlled by politicians. Even syllabuses and examinations are largely outside the purview of the teacher. Undue emphasis on examinations tends to turn the teacher into a mere agent for preparing pupils for examinations.

(g) Another reason why the teacher has steadily lost his leadership is his acceptance of paid private tuition on an almost commercial scale. There are teachers who give greater time and attention to private tuition than to their work in schools. Cases are not unknown where the teacher is so tired as a result of such private work that he cannot discharge his duties in the school adequately. Besides the acceptance of direct payment from a pupil or a guardian establishes a type of mercenary relation where the teacher becomes incapable of exercising the necessary authority or influence on the pupil.

(h) The factors mentioned above meant a deterioration in the quality of teachers both academically and otherwise. Once the quality of teachers deteriorated, their leadership over the students decreased even more rapidly. A vicious circle has thus been set up by which the loss of leadership of teachers tends on the one hand to keep abler people away from the profession and on the other because able people keep away, teachers progressively lose their leadership.

B. Growth of Economic difficulties

The loss of leadership by teachers would have been a serious problem at any time, but the growing economic difficulties made it even more critical. In spite of the increasing industrial and commercial development of the country and the opening of many new avenues of employment (like the Armed Forces or the higher Civil Services), formerly almost closed to Indians, the general economic distress has been on the increase. This is in part a world phenomenon. The immense destruction of resources and wealth during the war has created conditions of scarcity everywhere. Where countries industrially and economically more developed are in distress it is not surprising that India should also suffer. In addition to the growth of population, what has made the situation more acute is the refusal of the people to tolerate conditions in which they had formerly acquiesced. This has affected the student community in various ways of which the most important are as follows:

(a) With the rapid increase in the number of pupils, many are now drawn from social strata which cannot provide them with their minimum needs. In the past, the number of students was small and they generally came from the wealthier classes. They did not therefore have to face any serious economic difficulties at least during their student life. As the number of pupils has increased and they are drawn from all levels of society, they have started feeling the stress of economic struggle even during student life. In many cases, pupils have to support themselves partially or wholly throughout their school and college days.

(b) Great as are the economic difficulties they have to face during their student life, even more grim is the prospect that faces most of them at the end of their scholastic career. The majority of students in secondary schools or colleges have no definite plans about their future and do not know what they would do after they have finished. Their education is largely purposeless, and because it is purposeless, it does not fit them for any gainful occupation. Large numbers flow from schools to colleges and universities simply because they cannot think of anything else to do. The result is that a large proportion of the young men and women in the universities are there, not because they have any special aptitude for or interest in higher studies, but simply because they know of no other way of passing the time while they are looking for a job. In many cases, they are not even looking for a job but living in the vague hope that something will turn up. What makes the situation even worse is the higher expectations aroused by entry into institutions of higher learning. The students are no longer content to accept openings which might have satisfied them after they finished school. Combined with the disrespect for the existing system of education which its constant and sweeping condemnation engenders in them, their lack of purpose and the hiatus between expectation and capacity induce in the minds of the younger generation a sense of frustration which threatens to corrode their character and destroy the very basis of society.

(c) The severity of the economic struggle is thus enhanced by a permanent feeling of financial insecurity. The living the pupils earn during their student life is precarious and uncertain. The prospect that awaits them at the end of their studies is dark and gloomy. The resulting mental stress is aggravated by the miserable conditions in which the vast majority of the pupils live. School and college boarding houses generally provide the minimum amenities but many of the private messes lack even the bare necessities of life. Living in unlovely and congested surroundings, many students develop an attitude of bitterness and resentment which is strengthened by the egalitarian temper of the age. When

they compare their own condition with that of a small fraction of the community who are comparatively better off, is it surprising that many of them become rebels against the existing social order?

C. Defects in the existing system

While we must on the one hand resist the temptation of condemning wholesale the existing system of education, we must on the other make every effort to detect weaknesses and take effective measures to remedy them. There is no system of education which is free from defect, but this does not mean that defects which are discovered should not be immediately removed. There are some features in the existing system which are directly responsible for maladjustments in the student community and create among a large section a sense of discontent and frustration. Among them, only a few which require immediate attention can be indicated here:

(a) The present system of education is overwhelmingly literary and academic. This may be appropriate for a section of those who go for higher education, but it does not offer enough scope to children and adolescents whose tastes and aptitudes point towards an aesthetic, technical or other practical training. While it would be unfair to say that the aim of present-day education is to create only clerks, it has to be admitted that it tends to create a bias for a white-collar profession, and many of its products are fit for little else. The system neglects the development of the senses and the physical capacities. It tends to create an aversion to physical labour among the educated who are often lacking in simple manual skills. It is also largely indifferent to the development of character and a sense of moral values among pupils.

(b) The system of education is not fully satisfactory even from the purely academic point of view. Syllabuses are often excellent and if faithfully pursued would develop in the pupils the power of independent thought and balanced judgement. What is in fact generally developed is a tendency to amass information without understanding. One main reason for this is the undue emphasis on and the nature of the final examination. Pupils are judged by

the final examination which is more often a test of memory than of understanding or judgement. As a result, they neglect their work throughout the whole academic year and seek to cram in the last few weeks enough information somehow to get through the final examination. This has various undesirable effects. Since during the major part of the year, the energies of the pupils are not fully employed, they seek an outlet in various kinds of activities some of which are definitely anti-social. The present system also encourages a habit of intermittent work so that many of the students become incapable of steady and strenuous effort over long periods. What is even worse, an undue emphasis on the final examination may and at times does encourage a tendency for adopting unfair means as a short cut to success.

(c) The fact that the possession of a degree is an essential condition for employment, whether under Government or in private offices or firms, except at the lowest levels, has aggravated the evils created by the emphasis on the final examination. Students who have done hardly any work throughout the year pin all their faith to the final examination and adopt various undesirable methods to achieve success. Besides, this insistence on a degree induces hundreds if not thousands to enter universities who have neither the capacity for, nor interest in, higher education. In some cases, they are altogether unable to follow the work which is being done in university classes. The presence of large numbers of uninterested and/or inefficient students not only brings down standards and retards the progress of abler students but also creates fresh problems for the authorities. When students are interested in a subject, there is no problem of discipline in a class. Students who have neither the interest nor the ability to follow lectures tend to gossip and otherwise disturb the class. This does not remain confined to the classroom. Once they get into the habit of breaking rules in the class, they begin to break rules outside.

(d) The authoritarian character of the existing system of education is also an important factor in the growth of student unrest and indiscipline. This is a reflection of the authoritarian temper of our society where difference of opinion with an elder is often

regarded as disrespect for him. The students have little scope for initiative and freedom in curricular or even co-curricular activities, and are generally passive recipients of orders from above. Instead of being a democratic community, the school is often a rigidly stratified society where authority at each level demands unquestioning obedience from those below. So long as the system of education offered a prospect if not a guarantee of employment and thus had a kind of justification in the eyes of the pupils and the parents, its authoritarian structure was not generally questioned. With increasing unemployment among the educated today, it is inevitable that there should be a reaction against past acquiescence. In the case of students and other young persons, this spirit of revolt was aggravated by the atmosphere of defiance engendered by the struggle for independence. Civil disobedience called upon the people to disobey unjust laws, but it was sometimes difficult to draw the line between just law and unjust. In any case, once students got into the habit of breaking some laws, they developed a spirit of disrespect for all laws. Much of the student indiscipline of today is an aftermath of the part they have played during the days of the national struggle.

D. General loss of idealism

The constant pressure of poverty tends to destroy many of the finer feelings of man. The corrosive effects of prevailing economic distress have been aggravated by a general loss of idealism due to various factors. The course of world affairs in the last two or three decades has encouraged the growth of a spirit of cynicism, avarice and rebelliousness. A few of the major factors may be listed below:

(a) The two world wars have set in motion a process of general demoralization all over the world. During these wars, truth was the first casualty. Hatred became almost a religion with large sections of the people. The war saw the rise of a class who grew rich by adopting all kinds of objectionable methods. The hardships suffered by honest men when contrasted with the affluence of the war profiteers tended to lower the general moral standards

of the community. Young people could not but be affected by the loss of morals and the prevalence of black-marketing, bribery and corruption all around.

(b) Apart from a general lowering of standards in the community, the war led to the loss of seriousness of purpose among large sections of the students. During the war years, there was a feverish growth in certain types of business and industry. Government activities were also expanded on an inordinate scale. Large numbers of ill-qualified or unqualified young men found employment in these conditions. In many cases it was the unscrupulous rather than the able who prospered and it became widely held that neither character nor ability nor even hard work was needed for success in life. Is it surprising that students should be demoralized and academic standards and scholarship suffer during the war and its aftermath?

(c) The spread of a materialist ideology has also contributed to undermine the sense of values by its insistence that ends justify the means. The Communist demand for social justice has an immediate appeal, particularly to the young and holds out before them the prospect of a just social order. This element of idealism in Communism makes its indifference to accepted values the more dangerous. In the background of economic difficulties, unemployment and disillusionment, young students are not frightened by the loss of moral ideas or even by the threat to personal freedom, as they consider these a price to be paid for attaining a minimum security.

(d) We have referred to the sense of economic insecurity from which students of the present generation suffer. Even more far-reaching have been the effects of the loss of their social moorings. Old social institutions and beliefs have decayed with the result that the youth of today lack a firm foundation on which to build their life. The joint family was at one time a frame of reference within which the individual could operate. Today, not only has the joint family disintegrated, but all family ties have been greatly loosened. One of the strongest forces for socializing the child has thus been weakened and has not been replaced by any other.

force. The child is thrown more and more upon itself, and feels uncared for and unprotected. Much of the unrest and indiscipline among students is due to their feeling that they do not belong.

(e) Another factor which marks a change for the worse arose out of the very success of our national struggle. Twenty-five or thirty years ago, the heroes whom the young people admired were sufferers for a cause. Students then grew up in an atmosphere of idealism where the Congress and the national leaders held before them the challenge of suffering and sacrifice. With the attainment of freedom, the phase of struggle is over and those who were the leaders in the struggle are the leaders in the Government. This is inevitable but it has unfortunately induced a spirit of cynicism in the young, particularly among those who have no personal recollection of the sufferings of our national leaders but see them today in positions of power and prestige.

(f) The low social status of teachers has also contributed to the loss of idealism among pupils. In fact, it has warped their sense of values from early infancy. Children read in books about the respect that is due to teachers and contrast it with the actual state of affairs. This has induced in them a tendency to accept as natural even glaring discrepancies between profession and practice. They have thus come to believe that what is taught in books has no application to life. Plato has described the lie in the soul as the greatest evil that can befall an individual. We have today a community which by its disrespect to the teacher encourages the growth of the lie in the soul in the entire growing generation.

(g) The factors mentioned above have created an attitude of mind where success is the only value that the young recognize. Success is interpreted in a narrow sense and mainly in terms of worldly comforts. The success which demands long endeavour and labour for a cause (like the creations of art or the discoveries of science) is less respected today than the material success evident in the attainment of wealth.

II

Now that we have indicated some of the major causes of the

present unrest and indiscipline among students in India, we can proceed to consider measures for eradicating them. Not all of them can be removed at once. The disease has grown over the years and the remedy will have to be a long drawn out process. Also, there is room for difference of opinion about the order of priorities among remedial measures but to my mind a beginning must be made with the problem of the loss of leadership by teachers. This is specifically a problem of education, while the other major causes demand action at many levels. If the leadership of the teacher can be restored, this would in itself go a long way towards solving the other problems. A respected and competent teacher can help to check the demoralization and cynicism which prevail among students. Once the morale of the students has been restored, this is bound to influence every stratum of society.

A. Measures for restoring lost leadership of teachers

Our first measures must therefore be directed to restore leadership to teachers at various levels. While recognizing the need for constant reform, sweeping condemnation of the existing system of education must cease. As already pointed out, such unqualified condemnation has no effect other than to demoralize the teacher and create a sense of frustration among the students. Measures for educational reform can and must be carried on unceasingly but without exaggerating the defects of the existing system. We must also see that there is no sharp cleavage between teachers, old and new. The new teachers must have faith and enthusiasm in their work, but this should not express itself in the form of aggressive superiority nor must they regard old teachers as educational outcasts who are beyond redemption.

One of the first measures must be for improving the quality of recruits to the teaching profession. There must also be some relation between the numbers of teachers and the taught. Till better men are attracted to the profession no real improvement can take place. At the same time, even the best of men cannot be fully effective so long as there is the present disparity between the

number of teachers and pupils. The number of teachers must be increased, not only in order to improve the quality of teaching but also because of the profound psychological effect it will have on the country. At the elementary level alone, a national system of education would require about 2·7 million teachers. At present the number of teachers in elementary schools is only a little over 600,000, so that given the necessary expansion in education at least two million elementary teachers could be absorbed in the system. There would be resultant increases in the number of teachers at the secondary and higher levels. Unemployment among the educated is one of the main causes of the present sense of frustration among the youth. If even another four hundred thousand teachers at all levels were employed, educated unemployment would be virtually liquidated. This would create an atmosphere of hope and progress among the youth and bring about a revolutionary change in the psychological climate of the country.

Economic measures are essential but are not by themselves sufficient for improving the quality of teachers and raising their status in society. There are some who would place the entire emphasis on the improvement of scales. Others think that measures for increasing the professional competence of teachers will solve the problem. Still others hold that an appeal to the idealism of teachers will suffice. It is however only a combination of the three that can give us the desired results. The following measures are suggested at the university level:

(a) Of the many reasons why able people are not today attracted to the teaching profession, two deserve special mention. On the one hand, the spirit in universities has deteriorated and there is lack of a proper academic atmosphere. On the other, the salaries paid to persons of commensurate qualification are extremely poor in all educational institutions and compare unfavourably with salaries in almost any other profession.

Steps must be taken to restore the academic atmosphere of universities by weeding out political parties and intrigues. Vice-Chancellors and other officers of the university must be appointed

on academic and *not* on party considerations. The acceptance of the Radhakrishnan Commission's recommendations regarding the selection of the Vice-Chancellor and the reconstitution of university syndicates and senates would go a long way in removing these evils. The implementation of these recommendations would require the amendment of various University Acts, but would have hardly any financial implications.

Simultaneously, salary scales must be raised, particularly at the initial stages. The national interest demands that a fair proportion of the ablest men and women in the fields of the humanities as well as science and technology should be retained in the universities. If the universities could offer an initial salary which is comparable to what young men can expect in Government service, commerce and industry, some of the best men in their early youth are bound to be attracted to the profession of teaching. Once they are there and have developed an interest in their special fields, the higher rewards which Government service, commerce and industry offer for the successful man are not likely to wean away except only a few, and these will be men and women who have no sense of vocation for teaching. The conditions of work and employment are so much pleasanter in the universities that once the major needs of life are met, higher pay in other spheres of life is not so likely to tempt many away. The experience of British universities justifies such a hope. There is no doubt that in India also, some of the ablest among the students can be attracted and retained in the teaching profession if the initial salary is higher or at least comparable to the administrative services.

(b) In addition to such general measures of improvement in salaries, there must be some special categories of posts for men and women of exceptional distinction. One suggestion is to institute a system of National Professorships which will carry not only higher salaries but also be recognition of high achievement. No university will be entitled to a fixed quota of such appointments for no one will be appointed a National Professor unless he or she is recognized as an authority in the field. Appointment may be in any subject on the recommendation of a National Selection Com-

mittee. Once appointed, the Professor will hold appointment for life and may teach in any university in India. It is probable that not many universities will be able to find more than one person fit for appointment as a National Professor. Some will not find even one. Nevertheless, the existence of such posts would inspire university teachers to greater efforts and assure them of society's regard for high achievement. One immediate result of the institution of such professorships would be to stop the drift of able men from the universities.

(c) Another necessary measure is to extend special recognition to teachers who have the capacity to build up the corporate life of the campus. There are even in the adverse conditions of today some teachers in each university who are the friends, philosophers and guides of their students. In many cases, such teachers have an influence not only on the students who are studying in their own departments but on the entire student body of the university. Such teachers, if given adequate recognition, can do a great deal in restoring the leadership of teachers. They can also help in removing the sense of purposelessness and frustration from which a large number of students suffer.

(d) An analogous step is to extend special recognition to the members of the staff who have a special flair for teaching. Everyone of us can remember some teachers who, even if they were not outstanding scholars or researchers in their own fields, possessed a special quality by which they were able to give the students a new enthusiasm in their studies. The power of communication is a most important element in teaching and is not always proportionate to the learning of the teacher. If the aim of a university is both to transmit to the younger generation the knowledge already in the possession of the community and to extend the boundaries of such knowledge, it is obvious that it must have on its staff both the pure researcher and the pure teacher. There is at times a tendency today to emphasize research at the cost of teaching. Research is certainly important but a teacher should also get recognition for his teaching qualities. It may be difficult to suggest mechanical tests for judging such competence but the judgement of students

is often a fairly sure guide. In fact, sometimes the students are better judges of the capacity of the teacher than the teacher is of that of the students.

(e) There must also be provision for higher training of teachers of colleges and universities by creating facilities for specialized study abroad. The institution of special scholarships for the purpose would not only attract a number of able young men to the teaching profession but also help to improve the academic atmosphere of our universities by giving young teachers an opportunity to live in the more scholarly environment of selected western universities. We have to admit that with some honourable exceptions, a majority of teachers in our colleges and universities have lost a sense of dedication. In some of the western universities, this spirit is still in evidence in abundance. Some of those universities have a much better academic atmosphere and have on their staff men who are truly dedicated in spirit. Contact with such men in their early youth is bound to have a profound influence on the future generation of our teachers.

It will contribute to the same purpose if we can secure for each of our universities the services of at least one distinguished professor from abroad for a period of three to five years. The presence of one man can often change the atmosphere of an entire campus. If we choose our foreign professors wisely, they will help both to raise the standard of teaching and to create a proper academic atmosphere in the university. In fact, the best results will be secured if the invitation to a foreign professor and the deputation of young teachers for study abroad are carried out as parts of an integrated programme so that the young men on return can take up and continue the work which the foreign professor may have initiated.

(f) Improvement in the academic atmosphere and increase in the emoluments of teachers at all levels are essential but equally important is the need to improve the social status of teachers. It will take long before salary scales can be adequately raised because of financial and other reasons. There is however nothing to prevent special measures for increasing their social status. Nor-

mally in Government service, and elsewhere, the status of a person is linked up with his emoluments. There are, however, exceptions to this rule. A junior member of the Indian Civil Service had a higher status than a member of a Provincial Civil Service even when the salary of the Provincial Service man was higher. Ministers today invariably draw lower salaries than members of the permanent services but this has not in any way affected their prestige and social status.

The position of the Ministers may be safeguarded by the political power they exercise. In the case of the teachers, certain special measures would be required for increasing their standing in the community. We must try to recapture the ancient tradition where social prestige had no necessary relation to the economic standing of the individual. In ancient India, learned men were held in honour even if they were poor and it is only in recent times that social status has come to be so closely associated with the possession of wealth.

(g) Of the various measures for improving the social status of teachers, one which has worked well in Turkey may be adapted to our use. Whenever the Turkish Government contemplate any important legislative measure, they appoint a committee of university teachers to examine it from an academic and expert point of view. The Government are not bound to accept the advice of such a committee but the fact that university teachers are first consulted helps to raise their status before the public. The practice is educationally beneficial and politically sound. Teachers are given concrete problems to study and deepen their understanding of reality. The analysis of a problem by an academic body which is comparatively free from political prejudices is an advantage to the Government and enables them to avoid mistakes which might otherwise have been committed under the pressure of political and party passions.

What has been said regarding the need for improving the salaries, social status and professional competence of teachers in colleges and universities applies with even greater force to teachers

in secondary and elementary schools. Their salaries are in many cases hardly adequate even for their basic needs. Their social status is a cause for constant concern to all who wish to preserve the prestige of the academic life. In many cases their professional competence does not satisfy even the extremely low minimum prescribed today. Some inescapable measures are

(a) The need for revising the salaries of elementary and secondary teachers is the greatest and also presents the greatest difficulty because of the numbers involved. As against less than 30,000 teachers of all grades in universities and colleges, the total number of teachers in elementary and secondary schools is approximately 800,000. Even the most modest measures for improving their economic status would thus involve huge amounts but if we are serious about the future of the country, there is no alternative to finding the necessary funds.

(b) Even more than teachers in colleges and universities, teachers in the elementary and secondary schools require special measures for increasing their status in the public eye. Because of financial reasons, it is unlikely that any improvement in the salary scale that can be carried out in the immediate future would place them among the economically well off. Their demand today is only for an income which will satisfy their basic human needs and free their mind from the constant worry of making two ends meet. In such a context, special measures for increasing their social status become inescapable. The Government of India has recently initiated a step which can add to the status of the teacher at negligible cost to the State. Presidential receptions for primary school teachers were held in the Rashtrapati Bhavan in New Delhi. They cost a nominal amount, but the very fact that invitations were issued to men and women whom the villagers have till now regarded as of little importance caused a stir in the countryside. Every State could organize similar receptions and other special functions for secondary and elementary school teachers attended by the Head of the State and its Chief Minister. If the Chief Minister of each State makes it a point to meet a number of secondary and elementary school teachers at every centre he visits

this would help to raise greatly the status of the teaching profession in the eyes of the general public, specially in the rural areas.

(c) One other measure of great importance in this context is to raise the status of the headmaster. A good headmaster can make all the difference to a school. One of the secrets of the great success of the British Public School system is the status and quality of the headmasters. Thirty or forty years ago there were in India well-known headmasters with a Provincial and, in some cases, an all-India reputation. Today it is difficult to find headmasters who are recognized even throughout one State. One of our immediate measures must, therefore, be to raise the status of the headmaster. He must not only be given a salary which will attract the right type of person but also allowed wider powers in the appointment and promotion of teachers in a school. In a word, the headmaster must be the key man in the institution and made fully responsible for its progress and improvement. Once the responsibility for the welfare and reputation of the school is placed squarely on his shoulders, he can be expected to rise to the occasion.

I found that in Japan headmasters of secondary and elementary schools are given practically the same scale and this is comparable to the salary of executive officers. In Turkey, I found that an elementary school-teacher starts on about Rs. 250 a month and goes up to Rs. 500, as against about Rs. 1,100 to 1,500 for a Secretary to the Government. In other words, the ratio between the maximum salary of a primary school-teacher and that of the highest administrator is only about one to three. In India, this ratio is sometimes as great as one to eighty.

(d) A great enemy of the quality of teaching at the secondary and the elementary level is boredom and monotony. Teachers tend to lose interest by repeating the same lessons year in and year out. Measures must therefore be taken to break this monotony. The value of in-service training in improving the quality of teachers cannot be stressed too much. In recent years, Britain has demonstrated how even unqualified teachers have been transformed beyond recognition as a result of such training. We must, therefore, increase the provision for refresher courses and in-

(f) The Managing Committees of schools must be so constituted as to minimize, if not eliminate, party squabbles and cliques. If elections and intrigues have damaged discipline in universities, their effect on schools has been even more harmful. There are instances where the Secretary of the Managing Committee becomes a petty tyrant over headmasters and teachers. If elections cannot be altogether avoided in the constitution of the Managing Committees, some method like the election to the Board of Regents in New York State may be adopted. The Board is the supreme educational authority in the State and is elected by the State Legislature. It is still almost totally free from party politics. The reason for this is that of the thirteen members of the Board, only one is elected each year and holds office for a term of thirteen years. Since the Governor of the State has a tenure of four years and the members of the Legislature of only two years, the influence of the party on a member tends to be very small after the lapse of one or two years. A similar method of election for the Managing Committees of Indian schools would greatly reduce the party factions and intrigues which so often disfigure the life of the school community.

(g) The evils of the present practice of private tuition must be checked, but this can be done effectively only if the teachers are paid living wages. Even now, there are rules that a teacher cannot accept a private tuition without the knowledge and consent of the headmaster. There are also rules which regulate the number of private tuitions a teacher is permitted to accept. These rules are however more often violated than observed. The usual defence of the teacher is that he must live before he can teach and his wages are not enough to meet the minimum needs for himself and his family. With gradual improvement in the scales of salary, such rules may be more strictly enforced for regulating private tuition by teachers. Till such time as scales are sufficiently improved, it should at least be provided that tuitions must be arranged through and in the school. The headmaster may be authorized to make arrangements for special coaching of children who are comparatively weak or backward and have the work

carried out on the school premises by selected teachers under his supervision. Fees derived from such coaching classes should be divided among all teachers, though naturally those who participate in the programme should be entitled to a larger share. It must all the same be ensured that there is no suggestion of favouritism or patronage by the headmaster in the selection of teachers for the purpose. In this way, the present practice of uncontrolled private tuition could be checked and conditions created where teachers devote their entire energy and attention to their work in the schools. One might go so far as to say that even without any other change in the present situation this one measure—if effectively carried out—could bring about a revolutionary improvement in Indian education.

B Measures for dealing with economic difficulties of the students

The economic difficulties which the pupils face cannot be removed overnight or in isolation from the rest of society. Conditions in academic institutions will remain unsatisfactory till there is general improvement in the economic situation of the community. Nevertheless, every attempt must be made to effect improvements and remove disabilities as far as possible. Some of the measures proposed will require assistance from public funds but the sums need not be very large. The following specific measures are suggested.

(a) Steps can and must be taken to increase facilities for meritorious students who are economically handicapped. This problem is most acute at the university and college level though sometimes pupils in secondary schools also have to earn their living. There is at present provision for scholarships, stipends or other concessions for about 15 to 20 per cent of the pupils in schools and colleges. The number of such beneficiaries from public revenues is very much greater in a richer country like Great Britain. In a university like Oxford over 80 per cent of the students are in receipt of public assistance in one form or another. Our resources may not allow public assistance on such a scale, but some increase in the present provision is both necessary and pos-

sible. In view of our limited resources, we must also consider other methods for assisting students in maintaining themselves. One of these may be to enlist student labour on a much larger scale than has been done hitherto in providing some of the essential school and college services. The U.S.A. offers a shining example in this respect. Many of the students there work their way through school and college by working as bell-boys, waiters, janitors, newspapermen, library assistants and in other capacities. Another means of helping needy students would be to employ them in improving amenities in schools and colleges as described in a later paragraph.

(b) While the educational institutions can and ought to help to ease the financial burden on students, they must also take steps to ensure that students are able to take advantage of the facilities offered. The lack of purpose which characterizes so many students today must be removed by better planning of education. To receive elementary education may be an inherent right of every citizen, but in our existing circumstances, the right to education beyond the elementary stage must be earned. There should be a fairly careful scrutiny at the end of the elementary and a much more severe one at the end of the secondary stage. Only such pupils as have special aptitude and interest should normally be permitted to go to colleges and universities. The selection should be done largely by teachers and mainly in the form of advice to guardians as well as pupils.

There is nowadays a tendency to think of psychiatrists, psychologists and other experts whenever we talk of advice or vocational guidance for pupils. It is doubtful if such luxuries are desirable even for a country which can afford them. It is too much to expect that an expert can give a correct appraisal of a child's aptitudes and tastes by meeting it once or twice for half an hour. The attempt to provide such guidance for all children on a personal basis with adequate observation of each child over a long period would, on the other hand, be beyond the resources of the richest country. In any case, such a programme would be simply out of the question so far as India is concerned.

This need not however rule out the possibility of advice and guidance for our children. Teachers who have an opportunity of observing the child throughout the year and sometimes for several years continually are in a position to form a fair estimate of the child's aptitudes and tastes. What is needed is that teachers should establish personal contacts with their pupils. Quite obviously, the success of any such scheme would depend on close co-operation between teachers and parents. If the teachers take a greater interest in their pupils and establish personal relations with the parents, teachers and parents between themselves can give the children the best possible advice for their future career. This may require the introduction of a system analogous to the proctorial system in vogue in residential institutions by which each teacher is made responsible for a number of pupils placed in his charge. In existing circumstances, there is a risk that the system may at times degenerate into petty tyranny and/or surveillance by small-minded teachers, but the risk of such abuse of the system would be negligible if teachers work in close co-operation with parents and guardians.

If teachers play their role with vision and wisdom, adoption of such a system would have the double advantage of helping to restore the leadership of the teacher and of diminishing if not eliminating the present purposeless drift of adolescents into colleges and universities. By controlling the quality and number of entrants into higher education, it would also reduce the gap between expectation and capacity which is responsible for much of the frustration among the youth of today.

(c) The economic difficulties of students will not, however, be solved overnight. Nor will the institution of advice and guidance by teachers and parents immediately succeed in diverting all students into channels of education or training for which they are specially suited. The improvement of amenities in schools and colleges is therefore an immediate *must*.

We may deal with self-help programmes first. Construction or improvement of playgrounds, stadiums, theatres and gardens and in the case of older pupils, the building of schoolrooms

ot hostels should, wherever possible, be undertaken under the leadership of teachers. That this is not impracticable is proved by the experience of voluntary organizations in different parts of the country. It would be invidious to single out any for special mention, for many societies and trusts have constructed buildings for colleges, training institutions, many high and primary schools and hostels almost entirely by the labour of the students who use them.

The enlistment of student labour under the leadership of teachers for improving basic material amenities in educational institutions will have various advantages. It will help to ease the struggle for such pupils as have to maintain themselves by offering them the opportunity of earning at least part of their keep. It will also help to improve the physical environment in which they live and which, as already pointed out, is a major factor in creating a sense of bitterness among them. It must be recognized that playgrounds and gardens, assembly halls and rest rooms and libraries and reading rooms are essential to a school if it is to serve as a centre of community life and contribute to the all-round development of the child and the adolescent. In addition, such programmes will enable the teachers to come into closer contact with their pupils and open to the pupils creative channels for their energy.

Apart from such self-help programmes, schools and colleges may also initiate and assist projects where paid student labour can add to the wealth of the community. Examples which come readily to the mind are projects of local bodies or non-official organizations for the provision of social services like night schools and health centres or of amenities like public gardens and playgrounds and parks.

The State should also take steps to supply tiffin to school children either free or at nominal prices. School lunches have done more for the improvement of morale among pupils than almost any other single factor in both the U.K. and the U.S.A. A nominal charge may be imposed but the principal or headmaster should have discretion to allow free lunches to at least such of the pupils as cannot pay. Wherever possible, students should

work for the free supply of lunches. The Basic system offers the hope of contribution by the children to school funds. There can be no better use of such contribution than to utilize it for providing meals to the children themselves. If there be any surplus the funds may be utilized for giving them simple school uniforms.

C Removal of defects in the existing system of education

Large-scale reconstruction of the existing system is bound to take time. Besides, such reconstruction will be a continuing process as there can be no finality in a living function like education. Some of the more obvious defects can and must, however, be removed immediately in the light of our earlier analysis. The following points may be specially mentioned.

(a) Both the University Education Commission and the Secondary Education Commission have suggested reconstruction of secondary education in order to meet the requirements of adolescents of diverse tastes and aptitudes. Elementary education may be uniform in character, as the main purpose of education at this stage is to give the child an essential body of information and to develop in him certain habits of thought and action. With the coming of adolescence, differences in taste and aptitude begin to be clearly marked. Secondary education has therefore to be more diversified. Proposals are in hand for the establishment of multi-lateral schools as new institutions or by the conversion of existing ones. It is expected that with greater variety of courses at the secondary stage, an increasing number of adolescents will be diverted from purely academic studies. This will help to relieve the pressure on the universities. It will also help to remove one of the chief causes of the sense of discontent and frustration among young men and women by providing gainful occupation to many at the end of adolescence.

Along with these changes in the structure of the curriculum, steps must be taken to provide for the physical and moral education of pupils. For students in colleges and universities membership of a body like the National Cadet Corps is important not so much from the point of view of military training as for its value

in developing the physique and inculcating habits of regularity and discipline among young men and women. The ultimate aim should be to make such training available to all students who desire to have it, but this may not be easy of realization because of the finances involved. Facilities should, however, be so enlarged that all such students get at least one year's membership of the National Cadet Corps.

In view of the cost of the National Cadet Corps, a simplified form of service and physical education for all able-bodied students may be instituted. The cadets trained in the N.C.C. may serve as the leaders and instructors for such courses, thus reducing the cost of the scheme and offering the trained cadets the opportunity of exercising leadership. Such courses may be made available to all students who desire to join the Corps. In addition, every student free from physical defect may be required to satisfy a minimum standard of efficiency in various types of physical tests. Insistence on better physique of students as part of their academic routine would help not only in improving discipline but also in giving them more buoyance of spirit.

For school-children, scouting and guiding offer excellent opportunities of developing character and initiative. They not only provide a healthy and useful outlet for the energies of the children but make them more self-reliant and resourceful. They also help to develop in them a spirit of service to the community. Without making participation in such activities compulsory, facilities should be so expanded and membership made so attractive that hardly any children are left out.

(b) Along with the diversification of courses and increase of co-curricular activities, it is necessary to reconstruct the existing system of examinations. At present, there is undue emphasis on the final examination with the result that the energies of the adolescents during the major part of the year are largely unutilized. Much of the present unrest and indiscipline among students will disappear if they are compelled to work steadily throughout the year. The demand of continuous application to work would drain superfluous energies and leave little scope for mischief. It would

also encourage in them habits of steady work and development of such habits is one of the major purposes of education. Reconstruction of the system of examination by which the worth of a student would be assessed after taking into consideration the record of his work throughout the year as well as his performance at the final examination would thus bring a new discipline into the life of the majority of the students.

(c) It is also necessary to modify the prevailing modes of classroom teaching in both schools and colleges. What generally happens now is lecture or discourse by the teachers with the pupils as mere passive listeners. Because pupils are not required to be active their attention is prone to wander, particularly if the teacher or the subject is heavy or dull. From inattention to indifference is but one step. Once this happens the basis of discipline in the class is shaken and it is not long before there are outward manifestations of indiscipline. It is now universally recognized that children in elementary classes should be given activities which will keep them engaged and arouse their interest in classroom work. Similar results may be obtained by introducing tutorials, seminars and discussions in the case of older pupils. Where they have to participate actively in the work of the class the discipline of work develops their character and makes them better members of the school community.

The method of teaching now commonly used entails more work for the teachers than for the pupils. If the burden of lectures and discourses is lightened the teacher can supervise the work of pupils more effectively. A fully developed system of tutorials and seminars would demand an appreciable increase in the number of teachers and may not therefore be financially feasible in the near future. Two devices would however help in reducing if not overcoming this difficulty. One is to cut down the number of hours given to lecture or discourse and use them for supervising the work of groups of pupils. The other is to use senior or abler pupils to supervise some of the work of younger pupils. These two measures if used in judicious combination would also reduce the size of a class and thus enable closer contacts between teachers

and the taught. By calling for greater effort and initiative on the part of the pupils, it would also improve the quality of the education they receive. Simultaneously, it would enable the teacher to pay greater attention to pupils either individually or in small and manageable groups. A shift in the emphasis from lecture or discourse by the teacher to active participation by the pupils would thus help to overcome one of the main weaknesses of the existing system of education.

(d) The present insistence on the possession of a degree for employment except at the lowest levels must also go. The example of Great Britain has shown that a sufficient number of able persons can be recruited to the public service without insisting on a degree. In fact, the dissociation of a degree from employment has had a beneficial effect in the U.K. on standards of both universities and services and we may expect the same result in India.

Abolition of this condition would in another way help to improve the general atmosphere and have a direct bearing on the problem of discipline. In Great Britain, recruitment at various levels of service is based on age. The result is that a fair proportion of young persons have already been absorbed in various professions and avocations by the time they are 19. They receive further training in their own special lines after they have been definitely fixed up with jobs. The small numbers who continue with their studies do so either with a view to higher learning or in order to qualify themselves for professions which require a higher degree of technical or scientific knowledge. The introduction of such a system in India would immediately draw away from universities and colleges large numbers who are there without any purpose and are often quite unfit for higher education.

(e) There must also be a greater democratization of the school atmosphere so that pupils have a greater sense of freedom and initiative. The mentality of defiance which has grown up in recent years among large sections of the youth is partly due to a reaction against their former blind acceptance of authority. If students are denied freedom within their own limited sphere, is it surprising that when the supervening forces are removed they should at

times break out into license. Where students find modes of self-expression in sports or cultural or academic activities, the revolt against authority is never so marked or serious. Where students are deprived of normal and healthy outlets for their various urges for freedom, they tend to resort to activities that are unsocial or anti-social. Discipline grows out of a sense of responsibility and the sense of responsibility grows only out of the exercise of responsibility.

Among measures offering greater self-government to pupils, special mention may be made of the system in which the school is divided into Houses. Each House is again divided into a number of classes. In each class twenty to twenty-five children are placed in charge of a teacher who is assisted by one or more monitors. In choosing monitors character is given even greater importance than academic distinction. These monitors are given considerable responsibility in maintaining discipline in the classes. We should adopt the system with such modifications as local conditions may require. Further, the monitors of different classes should together constitute a Council of Monitors for maintenance of discipline in the school as a whole. The principal or headmaster should recognize these monitors as leaders in their respective classes and the Council as the collective leadership of the school. With some minor modifications the system should work even better in a college or university.

The Council of Monitors may also constitute a Juvenile Court of Honour. It is common experience that if children are put on their honour, they refrain from indiscipline and other undesirable acts. The system of honour should be developed from the earliest classes right up to the university stage.

There is another important reason why pupils must be given the opportunity of expressing themselves in diverse ways. Trial and error is the instrument through which life reaches us its most important lessons. It is better that these experiments of trial and error should occur in a sphere where error may not result in grave danger to society. If students are given a greater share in the governance of their own affairs it will have a three-fold influence in

restoring the sense of discipline and responsibility they have so largely lost during the years of political struggle. It will keep them busy and engaged and employ their energies in useful activities. It will train them in the art of citizenship and self-governance so that in later life they may avoid mistakes which would otherwise damage the structure of society. Most important of all, in carrying out tasks they impose upon themselves, it will bring to them the joy of self-realization.

D. Measures to revive a sense of values among students

We have already referred to the fact that student unrest and indiscipline is a part of the general malaise of society in the modern world. If we complain of lack of idealism among large sections of the youth, this is a reflection of society's loss of the sense of values. Students are an integral and perhaps the most sensitive section of the community. It is obvious that we cannot expect a strong sense of values among them, if the general temper of society is sordid and mean. This only throws into sharper focus the fact that education is a social function and must improve or deteriorate with the improvement or deterioration of society in general. If we are to revive a spirit of idealism among students, we must create a social atmosphere where values are held in high respect and students feel an urge towards realizing them. It is thus largely a question of restoring a sense of values in the community itself.

It cannot be reiterated too often that the lowering of the social status of teachers tends to warp our sense of values from infancy. This is in fact one of the major reasons for the loss of values among the younger generation. The actual plight of the teacher is a standing denial of what is theoretically accepted to be his due. The glaring discrepancy between theory and practice undermines the students' basis of faith. Even more damaging to their faith is the conduct of disgruntled teachers. Nowhere is it truer than in the case of the young that 'example is better than precept'. The example of disillusioned, disaffected and impoverished teachers serves to bring down the standards of conduct of pupils and therefore of society. If the measures we have recommended for

improving the status of the teacher and restoring his leadership are carried out one of the major reasons for the decay of idealism among students will disappear.

Once the status of the teachers has been restored it may be expected that the profession will regain its sense of values. We can then think of measures which will induce in the pupils a sense of their obligation to society. In all countries students are maintained by the effort of others and draw their sustenance from the wealth of the community. In a country like India where our *per capita* annual income is not even Rs. 300 a school pupil costs the community not less than Rs. 500 to Rs. 600 a year while a student in a college or university costs much nearer a thousand. Since pupils contribute hardly anything to the production of social wealth during their tutelage this means that the *per capita* income of three persons is required to maintain a school child. Similarly the cost of maintenance of a college student amounts to the *per capita* income of four or five persons. This fact imposes on all students a special obligation. On completion of their studies they must seek to return to society more than they have consumed. If they cannot do this they must at least compensate society for what society has spent on them.

One of the ways of inducing in students a sense of their obligation to society is to encourage them to associate with various types of projects for the upliftment of the community. With the advent of adolescence they should learn to realize that education is a great privilege which society offers to them and they must consist with their primary duty of preparing for future citizenship try to pay back some of their debt to the community. Various types of community services may be developed with the active participation of students. In some countries colleges and schools have adopted a neighbouring village and worked for its improvement in various ways. In others students and other young persons have contributed directly to programmes of national development and construction. In India programmes of reconstruction of national life whether in the form of community projects or national extension service or the provision of

essential services like education and sanitation offer a splendid opportunity to the young.

We have referred to the aftermath of the world wars and the spread of a materialist ideology all over the world. While their invidious influence cannot be denied, we should not ignore the capacity for devotion and sacrifice which the experience of war has evoked among millions. The end of the First World War saw young men dream of peace based on justice, equality and liberty. The end of the Second World War has brought freedom to vast numbers and made the ideal of social justice part of the texture of civilized society. In any case, we must remember that idealism is the most marked characteristic of adolescence. There is at this stage of life a sudden upsurge of emotions and young persons are prepared to face any risk for the sake of an ideal. Hardship and danger have a special appeal to the young and if the right ideals are placed before them, there are no heights to which they may not rise.

One word may be said here about the role of religion in creating a spirit of idealism among the youth. Religion resolves many of the conflicts which paralyse thought and action. It releases energies that recognize neither difficulties nor defeat. Religion not only permits but encourages identification with forces greater than one's own self. It thus enables the individual to transcend the bounds of avarice and selfishness. It is only when religion gets entangled with dogma and ritual that it is a limiting factor and cause of friction among men. In its wider aspect of liberation of the individual from the bondage of self, religion is one of the greatest forces for the uplifting of man.

Since it is during adolescence that the mind is most ready for identification with a higher cause and willing to sacrifice everything for its sake, it is necessary that pupils must not be denied the liberating influence of religion in this wider sense. Shorn of dogma and ritual, it will express the great human ideals which form a universal ethic for all men. Unless students are brought into contact with these great ideals of man, their lives will remain impoverished and meaningless.

One way of doing this is to organize a daily Assembly in schools and colleges where all students may get an opportunity of sharing in the riches of man's common heritage. To gather together for a few minutes, even if it be in silence, reminds the pupils of their common membership in academic life. The Assembly is thus valuable in itself, as it imposes on all the discipline of participating in a common experience. In addition, through common worship or the reading of great texts, it offers them an opportunity of coming into contact with some of the higher values of life and recognizing the basic unity of human ideals and aspirations. It is a general experience that schools and colleges which have an Assembly are invariably marked by a better discipline and fellowship among their pupils.

Realization of the basic unity of human ideals will also make it easier to carry out a programme of reorientation in the study of our history and national traditions. Much of the conflict and bitterness in the modern world is due to a wrong teaching of history. Till very recently history has been regarded as little else than a record of war and conquest. Men and nations have therefore been judged, not by their contribution to human welfare but by their success on the battlefield. Even national traditions have been used as instruments of national chauvinism and national pride. Individuals and nations have taken inordinate pride in military victories and forgotten that wars invariably lead to a lowering of at first material and later ethical standards.

If wars have in the past retarded human progress and led to social deterioration they threaten the very survival of man in the context of the modern age. It is therefore a matter of urgency that students today should get a better perspective of the world and realize that the history of man is an age-long march towards greater light, freedom and sweetness on which men and women of different nations, countries and ages have co-operated consciously on some rare occasions but more often without being aware of their common goal and common endeavour. Men have been more sensitive to the struggle and competition on the surface than to the far-flung co-operation which lies at the basis of

human progress, but they must now learn that it is only a half-truth that the struggle for existence is the law of life.

If competition has at times furthered the cause of progress, co-operation has been basic to the survival of the species. This is particularly true in the case of man. With his weak senses and low physical powers, he has yet triumphed over the rest of creation only because he was able to co-operate on a scale unknown to any other animal. This he has been able to do because of language. Speech gave him the power to communicate with a precision and over an area of experience which is unique. Since language is a social heritage that is transmitted from one generation to another through education, teachers owe it to society to emphasize the element of co-operation implicit in all communication through language.

We have already pointed out how cynicism and loss of ideals among the young is due to their sense of economic, social and psychological insecurity. We have also indicated some of the measures necessary to eradicate the sense of insecurity from the minds of the young. Closer mutual contacts between teachers, pupils and parents will go a long way to develop a sense of community in the young and to make them feel that they belong. Once the young have this feeling, they would not suffer so much from the sense of purposelessness which today baffles them. Even if the system of joint family has decayed, co-operation between teachers and parents may safeguard for the child some of the values which were formerly provided by that system. Emphasis on co-operation in society must not stop at abstract relations between groups, but cover also the day-to-day contacts between individuals of different age and relationship. If the youth of today can feel that the tradition of their forefathers is something which is living and growing, their sense of not belonging will vanish.

An essential condition for revivifying traditions is to recognize the inevitability of change. One of the major reasons for the youth's loss of social direction is the mental distance between different generations. Each generation clings to its own ideas and refuses to accept any growth or change. The younger generation

with its different background and environment is out of tune with the ideals of the old. If therefore, the older generation recognizes that its ideals must be adapted before they can be adopted by the coming generation, one of the major reasons for clash between fathers and sons will disappear. Along with this will disappear much of the restlessness and loss of values which characterize the younger generation of today.

The several measures suggested above will go a long way towards solving the problem of indiscipline and unrest among students. It would however be unwise to expect immediate or magic results even if all the suggestions in this study are adopted. It is also unlikely that all the measures can be introduced simultaneously. In adopting them we would be introducing measures not only of educational but social reform. If education trains the future citizen, it also determines the shape of future society. The value of such education depends on the character and competence of the teachers who impart it. That is why the fate of society depends on the quality of its teachers. It is no exaggeration to say that incompetent and dissatisfied teachers undermine the very foundation of society. Their incompetence and dissatisfaction infect the children and sow the seeds of revolution, disruption and decay. A band of teachers devoted to ideals and pledged to the continual recreation of traditions can on the other hand ensure conditions of unlimited progress and prosperity for mankind.

July 1954

THE ROLE OF EDUCATION

THERE is often a tendency to judge education—not by its capacity to develop the human qualities—but by its efficacy in providing employment. While one cannot deny that education must prepare individuals to be creative members of the community, one can question whether the provision of employment is its chief aim. It is evident that this cannot be the object of elementary or even secondary education. Elementary education can at best develop the physical and mental capacities of the child, give it a minimum quantum of necessary knowledge and inculcate habits needed for social living. Even secondary education, unless society is to remain static, must aim to produce young people endowed with the capacity to develop new knowledge and new techniques rather than finished craftsmen with high skill in a narrow field.

At the end of secondary education, we may distinguish between professional or occupational training and higher education. Professional and occupational training is necessary if a community is to survive, but to concentrate on such training alone is fraught with risk. Communities which have given highly specialized training to their brightest young pupils have sometimes discovered to their cost that with changes in the modes of production or of our knowledge of the laws and processes of nature, such highly trained people become often unemployed and sometimes unemployable.

Higher education—as distinct from professional training—is abstract and often has no direct relation to the practical problems of life. Its abstractness is however its saving virtue, for it gives to such education a universal aspect. Not restricted to any particular field, it enables the mind to rise to those general truths which give us our first glimpse of the world of spirituality. The discovery of these universal truths is also the basis of all human progress.

I

There can of course be no simple answer to the question as to whether education should be confined to matters of common concern to all human beings or devoted to training of specific abilities of different individuals. A popular way of expressing this opposition is to describe it as education for life versus education for a profession. Doubts, however, arise the moment the question is formulated in this form. What exactly do we mean by the term education for life? There is no such thing as life in general. Each individual is a member of a particular society and performs certain specific functions associated with the station to which he is called. Insistence on the specific duties of a particular station in life would tend to obliterate the difference between education for life and education for a profession.

The same result follows if we work out the implications of what is meant by education for a profession. A profession itself is a way of life, and hence education for a profession is education for a particular way of life. We must also be careful that the concept of one's station in life is not overworked. Insistence on station may divide society into rigid strata and lead to some kind of caste or class structure in which the individual is predetermined to perform a specific function. If this happens, the distinction between education for life and education for a profession again disappears. It may also be pointed out that insistence on one's station is likely to lead to a static society. One of the main lines of human progress has been to move away from rigid class or caste structure and give the individual a greater liberty in choosing his future vocation.

The failure to maintain an opposition so commonly accepted underlines the need to redefine from time to time the basic aims of education. Only if these aims are clearly realized can we attempt to relate what may be called general education to specialized education. No comprehensive analysis of these aims can be offered in a short essay. A proper understanding of the nature of education would have to be based on an analysis of the nature of the mind and its operations and the relation of the human mind to

society and the world. Without entering into the far-flung speculation to which such an analysis would lead, we can distinguish four related but distinct purposes which together constitute the end of education. Its first purpose is to develop the personality of the individual. It also seeks to give him knowledge of the world in which he lives. A third purpose is to develop skills needed to sustain and advance social life so that he can be a creative member of society. Connected with all the three but at the same time distinct from them is the fourth purpose which is to satisfy the individual's search after values.

Each of these four aims requires more detailed and specific formulation than can be attempted here. When we talk of the development of personality, we refer to the growth and maturity of the individual's physical, mental, emotional and spiritual abilities. A retarded body is not merely an absence of physical growth but has certain positively undesirable characteristics. Similarly an undeveloped mind not only lacks intellectual freedom, but is a source of superstition, obscurantism, fear and hatred. It is common experience that to deny a child affection means not only that the child is emotionally starved but that he becomes a source of danger and infection to others. The spiritual flowering of a personality may be more difficult to define but there is little doubt that, as in the other cases, here also the failure to grow is not a mere privation but a negation which has an adverse effect on the individual as well as others. One is in fact reminded of Alice's predicament in Wonderland. She finds that she has to run for all she is worth merely to stay where she is. The failure to grow does not leave one where one was: it sweeps one back to a depth below one's original starting-point.

The second aim of education is to secure knowledge of the physical world as well as of the ideas and ideals of society. Without such knowledge, the individual cannot survive, let alone develop his personality. In fact, possession of such knowledge is a condition of both personal development and service to society. There may at times be a tendency to equate education with the acquisition of mere information. We must also guard against

placing an undue emphasis on knowledge of the physical or the ideational environment severally for both are equally important for our understanding of the world. Nevertheless the acquisition of knowledge about the world in which we live is basic to all programmes of education.

The development of personality and the acquisition of knowledge of the environment are necessary for achieving the third aim of education. The individual can function only in a social context. If this milieu does not change and grow with the individual's growth tensions are bound to develop. In fact the individual's growth is fostered by a friendly and retarded by an uncongenial environment. On the other hand progress or deterioration of the different individuals leads to social progress or the reverse. If one is to be a creative member of society one must not only sustain one's own growth but contribute something to the growth of society. In the social conditions of today the average man needs all his limited energy to keep society functioning. Progress on the other hand demands an addition to what society has already achieved. Since in existing circumstances a major part of our energy is needed merely to keep up to the norm it requires an uncommon effort to go beyond it. Nevertheless it is an obligation which each individual must in some measure fulfil. We cannot take unless we give and vice versa.

The position is further complicated by the fact that apart from his role as a member of society each individual has an inviolate identity that is unique. He can find satisfaction only by fulfilling the demands of his inner nature. This may be described as a quest for values or a voyage of self-realization but however we describe it each individual has in him an element where he transcends his social needs. He cannot achieve self-realization by merely satisfying the demands of his society or performing the functions of the profession he may follow.

Reference has already been made to the paradox that education for life may in fact mean education for a specific function in life. In other words education for life if interpreted in a narrow

sense is hardly distinguishable from education for a profession. Nevertheless, a distinction has to be drawn for the reasons already mentioned. On the one hand, the progress of society is from status to contract, from rigidity to fluidity. On the other, the present organization of society demands from the majority of its members almost their entire energy merely to sustain the standard of civilization already achieved. It may be that with progress in social development, we will discover that the creative spark in man is more widely spread than we at present imagine but, even in a happier society, there will be differences in the brilliance of the spark. In future all members of society may contribute more to general social welfare, but the really significant advances are likely to take place, then as now, through the efforts of individuals of genius. Before, however, such an effort can be made, it has to be ensured that the individual or group making it has sustained the standard common to most members of the community. It is only from the achieved successes of today that we can launch into new experiments of the future.

The first two aims of education are to develop the various faculties of the individual and give him some knowledge of the world. So far as the first is concerned, there is no need to think of any special functions which he may be called upon to perform in later life. Specialization begins to show in the second aim and determines the aspects of reality of which he requires greater and more intimate knowledge. Specialization shows more clearly as we consider the third and fourth purposes of education. An individual can contribute to the sustenance and advancement of social purposes and thus be a creative member of society only in his individual way. Similarly, his contribution to the realization of old or discovery of new values must be based on his individual capacity. Self-realization is from the nature of the case essentially an individual function. It is said of religion that it is what a man does with his solitariness. The values of science, philosophy and art no doubt contribute to the enrichment of the life of the community, but like religion, they also are essentially the result of what a man does in his solitude.

Prima facie, it therefore appears that the first aim of education leads to a theory of general education while the third suggests training of special faculties and aptitudes. The second aim includes both general knowledge of the world and special knowledge suited to particular avocations. The fourth does not fit into either category and stands by itself.

Analysis will, however, show that such clear-cut distinctions are not tenable. Each aim supports and is supported by the others. A striking example of this is furnished by the advance in material standards of life achieved as a result of abstract research which has at first sight no relation to any practical problem.

II

We may now try to see if these purposes of education may be related to different stages of education. One word of caution is however, necessary. To relate a particular purpose with a particular stage does not imply that it does not operate in the other stages. All that is meant is that a particular purpose is more clearly seen in a particular stage.

It is then obvious that the development of the personality of the individual and acquisition of general knowledge of the world must begin at the primary or elementary level. This covers early childhood and continues up to or a little beyond the advent of adolescence. There can be no question of developing any specific skills or abilities at this stage. The only aim of education at this level is to give the child a corpus of knowledge which he can share with all members of his society and to develop in him physical, intellectual, social and moral habits necessary for his survival and progress. Besides, his aptitudes are largely undifferentiated at this early stage of life. That is why we can and often do speak in terms of generalized education for children.

While elementary education is the most general in purpose, it is simultaneously the most concrete of all the stages. We can give the child knowledge of the world in which he lives only by starting from his immediate surroundings. Any skills we want to

develop in him have also to be based on the immediate requirements of his environment. If elementary education is to fulfil its real objective, it must be embedded in the local experience of the community. Since such experience is specific in nature, elementary education, in spite of the generality of its purpose and perhaps also of its pattern, is more specific in content than education at any other stage.

The concept of Basic education which has in recent times developed in India is a recognition of this truth. Basic education seeks to develop the child's personality by giving him knowledge correlated to a craft with which he is familiar. In its insistence upon a craft which is prevalent, Basic education has fastened upon an important truth. It recognizes that for a child, abstract teaching is not merely a strain but remains unreal. By emphasizing craft, the element of activity is immediately brought into the pattern of education. Further, craft means socially useful activity so that the child is from the very beginning taught to recognize his function as a member of society. Insistence on a local craft is also a recognition of the educational principle that learning must proceed from the familiar to the unfamiliar. Finally, it seeks to develop habits of citizenship in children, not through abstract principles which have little meaning for a child, but by making them practise it in their daily life.

The very virtues of Basic education, however, suggest that the content of elementary education must differ from locality to locality. The pattern may no doubt be the same, but the specific details may differ so much that the underlying unity may be missed by all but the careful observer. The purposes of education are common to all but the way in which such purposes can be fulfilled depends at this stage on making the education as concrete and specific as possible.

Psychologically, there is a justification why elementary education is general in a specific environment. It is general because it caters to the wide-awake curiosity of a child. The child wants to know the why of everything that comes within its ken. It seeks to unite in a common world the diverse experiences that come to

it with all their novelty. Elementary education has to be specific in respect of the environment but general in respect of its purpose. It is specific because it starts with the known environment. It is general because it aims at the integration of the life of the child with that of the community.

As we proceed from elementary to secondary education, a new principle comes into operation. What distinguishes man from all other animals is his power of abstraction. In spite of deficiency of physical power and weakness of the senses, man has triumphed over all other animals because of his capacity to derive general laws from particular instances. The essence of such generalization is the isolation of the significant from the irrelevant. Our experience at any moment is full of an infinite number of isolated items. We may focus our attention on a particular object, but we cannot altogether shut out impressions of odour, sound and sight on the fringes of our consciousness. If, however, we allowed this multitudinous world of senses to distract us, we could never find any unity in our experience. It is only by selecting the relevant items and combining them into significant objects that our experience becomes coherent and intelligible.

It may be said that, in a sense, even animals separate the significant from the irrelevant in their experience. A tiger stalking its prey excludes from its attention almost everything else. There is nevertheless a distinction between such selection and the selective process which governs human thought. For the animal, the selection is invariably an instinctive operation. It is therefore repetitive and at the same time unilinear. Given the same sort of situation, it is almost infallible. If the situation changes, the instinctive response may and often does lead to disaster. In the case of man, selection is an act of the intellect, not of the instincts. It is much more complex and rarely repetitive. Because such selection is based on abstraction, it derives from man's power to break up his experience into its constituent units and determine the relations which obtain among them. This power enables man to combine great complexity of content with a unity of structure and is the basis of his superiority over all other animals. This may be seen

with reference to his capacity for communicating his ideas. Birds and animals produce noises that have a limited significance, but it is man alone that has created language out of articulate sounds.

While the power of analysis gives man ultimate superiority over all other animals, it makes him comparatively helpless till these powers have developed adequately. In the case of most animals, the skills needed for the sustenance of life are acquired before the end of adolescence. The human adolescent, particularly in modern society, cannot look after itself adequately. In addition, the duration of adolescence is longer in the case of man. His preparation for life therefore continues throughout childhood and adolescence and even beyond.

The stage of secondary education may be broadly equated with the period of adolescence. The characteristics of childhood are, on the whole, well marked and uniform. One is, therefore, on somewhat surer grounds in dealing with children. They have to be given a certain amount of information and trained to certain habits of thought and action. One may also adopt a definite attitude towards grown-ups since their habits and aptitudes are already comparatively set. Adolescents are neither children nor adults, and what is more disturbing pass from one phase to the other with bewildering speed. They are then passing through psychological changes of profound significance to the individual and the community. Besides, with the coming of adolescence, differences in aptitudes and interests come to be more clearly marked and demand a larger field of choice. The uniform pattern of elementary education has therefore to be replaced by a variety of courses to cater to differences in taste, aptitudes and ability.

It is but one step from diversification of courses to specialization. Development along selected lines inevitably leads to a demand for the provision of specialized courses. The form which this demand most often takes is for the acquisition of specific skills as a preparation for life. It is argued that after the individual has, as a child, acquired the necessary basic skills, he must at the secondary stage develop specific skills leading to a profession. If this is not done, secondary education, it is argued, would be merely a prolongation

of elementary education. Secondary education must according to advocates of this view be education for a specific vocation or training.

It, however, appears to me that the demand for training in a profession is not justified at the secondary stage. Elementary education may, no doubt, provide the basic skills but thus it can do only in a very general sense. Further, the period of elementary education is too brief to ensure that these skills are established permanently. There is thus a risk that they may again be lost unless the period of their inculcation is extended for some years beyond the elementary stage.

Again, the body of information acquired at the elementary stage is too meagre and too uncertain to ensure for the individual smooth progress through life. As a social animal, man depends not only on his own experience, but also on the experience of the society in which he is born. Since his actions are based not primarily on instinct but on analysis and abstraction, he must acquire a sufficiently large and varied body of knowledge on which to operate. The demand for the prolongation of general education is thus based on the nature of man. The need has always been there but has assumed even greater importance in view of the increased and increasing complexity of modern life. Society must, therefore, provide for the continuation of education, either in the form of secondary education or as after-education of the adult, of as large a proportion of the community as possible.

There are other reasons why secondary education should, in the main, be what is described as general or liberal education. We have already referred to the instability of adolescence. This is the period through which children are growing into adults, and the growth passes through many phases. Each phase may stress a different aspect of the personality. It is also too early to take a decision about future life on the basis of the emergence of any particular trait. A final decision about future profession at this stage may thus lead to grave mistakes. During adolescence, the young boy or girl should be allowed as great a latitude as possible. Since training in specific professions cannot be changed with every

change in the adolescent's mood, it is necessary to make education at this level as broad-based and general as possible. Much of the value of providing diversified courses would be lost if the adolescent boy or girl was tied down irrevocably to a choice once made.

Apart from the needs of the individual, society's needs would be better served by a more generalized type of secondary education with diverse courses. Adolescence is a period when also new skills are being acquired. It is at this stage that skills have a chance of being permanently established. If these skills are too specific, there is a risk that the individual may set in a definite mould. Any change in the pattern of society would not only make these skills less useful but also make it more difficult for him to adjust to the changed circumstances. If, however, broad skills are acquired at this level, the possibility of applying them to a variety of situations is greatly enhanced.

Psychologists are generally agreed that the essence of learning is the power to generalize. If broad skills are acquired, they can be applied to a variety of situations. If, on the other hand, highly specialized skills are established before the power of generalization has developed, an individual may find himself helpless in a changed environment. There may be some justification for seeking to stabilize skills in a static society but such an attempt would be fraught with risk in any society that is liable to rapid change. Modern society is markedly dynamic. The practices of today are superseded tomorrow. In this fast changing world, stabilization of specialized skills at an early age would, instead of fitting the individual better for life, make him less fit to meet the challenge of changing times.

What has been said about secondary education would apply, but with some modifications, to higher education as well. The main difference is that in the case of post-secondary education, the need for the establishment of broad skills is not so urgent. Society has a right to expect that such skills have not only been formed but stabilized at the secondary level itself. Society can also expect that secondary education has provided for the development of the power of abstract thought and generalization in the individual. It

is also expected that the individual has at the end of this stage developed the basic human qualities of clarity of thought and appreciation of values. Concentration on the acquisition of specific skills after this stage does not therefore have the same risks as at the secondary stage. If we can assume that members of society have acquired general wisdom as human beings and as citizens by the time they complete secondary education, they can at later stages concern themselves mainly with the preparation for the specific roles they may be called upon to play in society. This may be the role of men of affairs following specific professions. It may also be the role of men of learning who have made the search for truth their business in life.

We have spoken of the acquisition of specific skills as the main purpose of education at this stage. Such specialized development must however take place simultaneously with a deepening of social understanding and insight. Our understanding of the meaning and purpose of life depends on the depth and variety of our experience. Obviously the limited experience of adolescence is not adequate to this end. We must acquire it in the course of adult life. We have also to remember that what we call education for a specific profession must, if it is to be fully satisfying, contain in it the basic values of liberal education. Any profession we may seek to follow is born out of some social need. The determination of priority among such needs is a judgement of value and gives to the profession its social significance. An understanding of this significance not only enriches the life of the individual but gives a greater concreteness to the elements that constitute the profession and brings out, as Whitehead has indicated, the liberal values implicit in professional education.

One other word of caution is needed. Secondary education as at present organized does not always give the individual the necessary knowledge of the world nor develop in him the reflective wisdom and disciplined imagination one may expect at its close. What often happens is that specialization along some narrow groove starts before the individual has received the broad-based education which alone can make him a creative member of

society. That is why we sometimes come across specialists who outside their own field are intellectually and emotionally immature. Their knowledge itself, in the absence of what one may call wisdom, may be a menace to society. This makes it necessary so to orientate courses at the post-secondary level that the sense of values is not lost. An adolescent may acquire knowledge about the facts of life and society, but he can hardly be expected to develop an understanding of their deeper significance.

The fourth aim of education is most clearly seen at this stage. We have tried to define it as the individual's quest for values or voyage of self-discovery. Different individuals will realize that in different ways. Some will find satisfaction in the performance of duties attached to the profession they may adopt. These professions may require physical, intellectual or aesthetic skills. There may be others who may find self-realization in the pursuit of truth or the attempt to create new values in society. Whatever be the object the individual sets before himself, he can undertake the task only when he has mastered, so far as is necessary for his particular avocation, the knowledge and experiences available to his society. He can be a skilled mechanic only if he knows what mechanism has achieved in his day. He can seek to extend the boundaries of knowledge in his special field only after he has mapped out the existing world of knowledge.

We arrive at the obverse of the paradox which we pointed out in the case of elementary education. Elementary education is general in purpose but concrete in content. Both the purpose and the content are abstract in higher education. In elementary education the field is co-extensive with experience, while in higher education we seek to know more and more about a continually narrowing field. In the field of higher education, however specialized a field of study may be, we seek to understand it in its universal aspects and bring it under laws of continually wider application.

We may, therefore, arrive at the following tentative conclusions. Any sharp division between education for life and education for a profession is untenable. At different stages of education

a greater emphasis may be placed on the one or the other but at no stage can either element be completely ignored. It would, however, save a great deal of confusion if a distinction is drawn between education and training. Education is a drawing out of the innate qualities of the individual. Since the individual cannot exist except in a social context, education necessarily has a social content, but this refers to the general and not any specific demand of society. Education is, therefore, essentially general in its purpose and seeks to secure the physical, mental and moral development of the individual. Its aim is to fit him not for a specific profession but for life. Training, on the other hand is essentially preparation for the performance of specific functions. For the reasons detailed above, it is best undertaken after education for life has reached a stage when knowledge and skills have reached a reasonable stability and the general framework of human reference has been established within which specific knowledge and skills can find their full significance. As such, elementary and secondary education are primarily processes of education while the stages after secondary education—except in some rare cases—are primarily phases of training. Since, however, there can be no life in general but only life in specific functions in a specific society, an element of training cannot be avoided even in elementary education. On the other hand, since every profession is an expression of life, what we regard as training for a specific profession must have in it an element of education in the broadest sense.

III

In the ultimate analysis, the efficiency of a system of education rests on the quality of the teachers. Without good teachers, even the best of systems is bound to fail. With good teachers even the defects of a system can be largely overcome. It is therefore essential to attract and retain the right type of men and women into the profession, give them the necessary training to increase their efficiency and create conditions in which enthusiasm for work is maintained throughout their professional life.

If the teacher determines the quality of education, he is also the keystone to the future prosperity of a society. It is the quality of the individual that determines the quality of a society, and the individual is largely the product of the training he receives. The teacher's position in the social system is therefore decisive. Yet there is no denying that in contemporary India, and one may perhaps add, the contemporary world, the teacher enjoys neither the respect nor the status that is his due. What is worse, the teacher himself has too often lost his respect for the profession and submits to the treatment that society metes out to him.

The disregard for the teacher is a symptom of the contemporary disregard for human values. Modern society tends to measure everything in material terms. The importance of a person or a profession tends to be judged in terms of money and power. In sharp contrast to the past when teachers were honoured however poor or powerless they may have been, contemporary India places a disproportionate emphasis on monetary standards. The price she has put upon the teacher is of the lowest and yet it seems strange that this should be so. Even if one looks at things from a purely material point of view, it seems strange that persons who are averse to placing valuable instruments in the hands of an untrained or irresponsible mechanic should so readily surrender the most precious wealth of the community—its future generations—in the hands of persons who are often ill-trained and almost always ill-paid and discontented. An experienced teacher once said in bitterness that since society starves teachers in the body, they take their revenge by starving children in the soul. This is not an edifying sentiment and yet it cannot be denied that it is often a true description of the existing state of affairs.

Whatever be the ideals with which a young man starts in his vocation as a teacher, the buffets of fortune knock out the ideals and leave him a disillusioned and often embittered man. Nothing is more corrosive to young enthusiasm than a spirit of cynicism. It is a sad fact that teachers are very often prone to such cynicism and despair. The effect of this on the young generations can be easily imagined. A society which ill-treats its teachers is

therefore undermining the foundations of its present welfare and future progress

The teacher's loss of self-respect is partly due to forces over which he has no control. The change in social valuation has affected his attitude towards the profession itself. In common with a majority of the people, he has become more mercenary. Even twenty or thirty years ago, there were teachers in India who in spite of their poverty commanded universal respect through sheer force of character. Today such teachers are rare and their number is dwindling. Instead, there are many teachers today who run after persons who have wealth or position.

The fault however does not lie with society alone. The teacher cannot absolve himself from blame for the present state of affairs. He too has forgotten his vocation. There is nothing more pathetic than the spectacle of one who has lost his ideals. Poverty and social neglect may be contributing factors, but cannot by any means be regarded as the sole cause of the plight of the teacher. Many persons come to the teaching profession without any sense of vocation. They become a teacher because they can do nothing else. It is thus the rejected, the misfit and the disappointed who often crowd the profession and stay there against their will because they have nowhere else to go. So long as such a state of affairs continues, how can there be any improvement in the status of the teacher or in the type of education which he imparts?

Any reconstruction of education will ultimately depend upon the role the teachers play. They are literally the arbiters of a nation's destiny. It may sound a truism but still it needs to be stressed that the teacher is the key to any educational reconstruction. The most perfect scheme of educational reform will remain a dead letter unless there be competent and devoted teachers to carry them out. Similarly, the most carefully prepared programmes of social advancement will in actual operation fail unless there are individuals of the requisite quality to carry them out. It is the quality of personnel which is decisive and the quality will depend largely on the type of education and training prevalent in the community.

The people who are going to matter in any programme of educational reconstruction or social regeneration are therefore the teachers who will train the future generations. To build up a new generation of young persons who will have quickness of mind, sensitivity of feelings and skill in manual and mental operations is an ideal which is worth the highest endeavour. In order to perform these functions well, the teachers must serve as the vehicles of the best that is in our society. The process of education is not a case of imparting information as water is poured from one bucket to another. It is more like the process by which one lamp enables us to light a hundred other lamps. Unless the flame from which other lamps are to be lit is itself living, there can be no illumination for society. The personal contact between the teacher and the taught developed during their common quest for truth is what matters most in any educational process. If this is forgotten, there may be higher scales of pay and the most elaborate systems of training for teachers, and they may use the most up-to-date implements, but the process of education will remain dead and inert.

It may however be pointed out that the teacher's duty, onerous as it may be, has its own compensation. Self-expression is what all men seek. Scientists and artists, poets and painters all testify that there is no joy comparable to that of the realization of one's being. The teacher has the opportunity of self-expression in as large a measure as any could wish. There may be, and in fact is, a great deal of dull routine in what he does from day to day but there are also occasions when things are revealed in a flash and his humdrum work lifted to a higher plane. All teachers who are worth their salt have shared this experience and know that it is the compensation for the dull routine of day to day.

The contact between the teacher and the taught is one of the few instances of creative process in the relations of men. This cannot be regulated by law or convention. There are, of course, material considerations which prevent teachers from always living on a creative plane or rising to it except at rare moments. The conditions under which they work are often deplorable. Obviously,

no teacher can give his best if the classes are overcrowded if there are more hours of work than is physically comfortable and the wages are such that they do not supply the bare necessities of life. With all these limitations it is still possible for the teacher to give something to his pupils for which they will remain grateful throughout their lives.

IV

It is only in recent times that the provision of education to all citizens has been recognized as an obligation of the State. In a sense this is a necessary corollary to a democratic conception of society. The essence of democracy is that all citizens are equal in the eye of the law. It is obvious that such equality has no meaning unless they have equal opportunities to develop their latent capacities. Education thus becomes one of the main instruments for making a democracy full and creative. Men and women differ in their natural abilities but such differences do not depend upon the social or economic strata to which an individual belongs. If democracy is to be really effective and guarantee to all individuals the right to develop to the fullest extent, education has to be universal and free.

Provision of free universal education is therefore recognized today as one of the primary duties of the State. For financial and other reasons no State has however found it possible to provide facilities for education on a universal and compulsory basis except at the elementary level. In countries where there are large numbers of illiterate adults, special provision has also been made for their education. Beyond such provision, facilities exist mainly on a voluntary basis and at the option of the individual or the family. Even in a country so prosperous and education-conscious as the United States, compulsory education is provided only up to the age of 16.

With the spread of democracy, the demand for equalization of opportunity is becoming more insistent. This has led the State to increase facilities of education in two ways. On the one hand the

State is seeking to provide education to areas and groups to which it was not available before. On the other, the State is gradually extending the period of education for all. The decision of the United Kingdom to extend the period of compulsory education and to provide scholarships on an increasing scale at all levels is an example of the manner in which this tendency expresses itself in State action.

By electing to become a democracy India has accepted in advance the justice of such a demand. Areas and groups which had never before received the advantages of education are today asking for special measures to make up their leeway and stand on equal terms with the rest of the country. The principle of compulsion is being gradually introduced and extended. In the last seven years, the area brought under compulsion has increased manifold. Simultaneously, the period of compulsion is being lengthened. Till now, compulsion has been enforced only up to the age of 10 or 11, but it is now admitted on all hands that compulsion must be extended up to the age of 14 and this has been recognized in the Constitution. Maulana Abul Kalam Azad, the first Education Minister of Free India, has gone further and declared that in his view it is the prerogative of every citizen to receive free education up to the secondary stage. Compulsion is thus being extended both in space and time.

Modern man has to face problems which were unknown to his predecessors. In earlier societies, it was a minority which supplied the leadership, shaped policies and carried them into execution. The vast majority of the people were content to follow their lead. With the spread of democracy, the situation has changed and all citizens have to share in the affairs of the State. In addition, States are interlinked as never before. The common man today is therefore far more responsible for the destinies of the world than at any time in the past. This increased responsibility demands that every citizen of the modern State must have the opportunity of acquiring the knowledge which is needed if he is to act intelligently in this critical stage of the world's development. All members of a community cannot, however, reach to the highest flights. There

is therefore a risk of loss of contact between the small minority of leaders missionaries pioneers and prophets and the vast majority who tend to conform to the existing patterns. Secondary education must bridge this gap and train a cadre of secondary leaders who can interpret the vision of the leadership to the rank and file and the hopes and fears of the rank and file to the leadership. It is in this context that one can understand Maulana Azad's insistence that free and compulsory education to all citizens must be provided not only up to elementary but up to the secondary stage.

Such extension of the area of education in both space and time has become the more necessary in the modern world where different societies and individuals have been brought into close contact with one another. All organisms are in a process of continual change. This applies equally to societies and individuals. Individuals change through growth and the acquisition of new experience. Societies change through the flow of time and the replacement of one generation by another. We may try to make our children conform to our standards and ideals but we cannot prevent them from interpreting our teaching in their own way. All interpretation is however change. This happens even when societies and individuals live in comparative isolation. When different cultures and civilizations meet such changes become more rapid and far reaching.

Physical neighbourhood of all men side by side with their spiritual and mental isolation is one of the paradoxes of the modern age. Unless different peoples with different backgrounds and outlooks learn to accommodate one another clashes are inevitable. Any clash is bound to be catastrophic in the modern context. Clash cannot be avoided unless all societies are prepared to make necessary adjustments in their outlook and temper. In fact resistance to such changes would only strengthen the forces working for change and may lead to violent upheavals. Since change is inevitable the function of education ought to be to create conditions where adjustments and modifications can be carried through without violent disruption or disturbance.

With the spread of democracy, the need as well as the possibility of carrying out changes without disruption has increased. Where privileges are confined to a small minority, they fight for their retention. The majority who are denied equal opportunities develop an attitude of opposition to existing social forms. Tension is thus bound to develop in an undemocratic society. This is the element of truth in Marx's formulation of *Class Struggle* as the essential principle of social change. Marx and Engels themselves, however, recognized that in a democratic society, necessary changes may be brought about without violent clash.

In *Science, Democracy and Islam* I have referred to some of the risks which accompany attempts at bringing about social changes through violence. Revolutions are always inferior to evolutionary processes for achieving social equilibrium. For one thing there is no guarantee that a revolution must succeed. For another, even where a revolution succeeds, it generates stresses and tensions which tend to lead to other revolutions. This is a major reason why democratic methods are always to be preferred for bringing about social change.

In fact, one may go further and say that real and stable progress cannot be achieved except through democracy. There is a widespread superstition that at least in the short run dictatorships are more efficient than democracies. The whole of history refutes such a contention. Whenever there has been a clash between a democratic and an authoritarian society, the democracy has prevailed in the end. This is not an accident but is inherent in the nature of man and society. No great social purpose can be achieved without the co-operation of many, and co-operation is one thing which an authoritarian society can never ensure. In a democracy, there appears to be initial hesitation and delay, but history has proved that this is not a disadvantage. Hesitation and delay arise because many in a democracy are not sure of what course to follow or even if they clearly understand one another. Discussion, debate, objections and arguments may take time but help to dispel doubt and uncertainty. In the end, a democracy

when it acts can be sure of a broad agreement of purpose among the participants

There can be no such assurance of a common purpose in a dictatorship. In fact even common understanding cannot always be presumed. This is why a dictatorship is less efficient in both peace and war. So long as a social movement or a military campaign is succeeding the defects of the dictatorship may be concealed. During such victorious phases second rank leaders are willing to take decisions and the dictator is not likely to reprimand or check them. Should there however be even a temporary set back the dictator is apt to throw the blame on his lieutenants. He cannot allow any suspicion of failure to attach to his name. The dictator must be infallible or perish. In moments of crisis his lieutenants therefore dare not act on their own. They are in fact at such times afraid to ask even for a clarification of the dictator's intentions. The request may easily be misunderstood as an implied criticism of his policy or distrust of his judgement. If there is one thing no dictator will tolerate it is a questioning of his authority. This explains why a dictatorship—even when it has achieved dazzling success in the initial stages—has in the end always gone down before a democracy. The absence of discussion and debate must lead to an absence of common purpose and understanding.

The weakness of a dictatorship lies precisely here. Commands are issued and rarely has one the courage of even asking what the real meaning of the command is. Each level of lieutenants interprets such orders according to its own ideas and carries them out as best as it may. Since communication is one of the most difficult things in human relations this however carries with it the risk that what is actually done is quite different from what was intended. There are perhaps no words which are more often used in English than *I mean to say* or *what I really mean is this*. Even in ordinary conversation we find we have to explain ourselves again and again to be understood. Nor is it different with any other language. The delay and apparent indecision of a democracy is an attempt to overcome possible misunderstanding. By avoiding

discussion and debate, an authoritarian society may seem to act more quickly, but the action is as likely as not to be based on misunderstanding and confusion.

The essence of education is such discussion and debate. It has at times been described as the great dialogue between present and past, between diverse points of view and among men with different backgrounds and experience. If education seeks to bring to the individual the accumulated wisdom of the ages it also seeks to establish immediate contact between each individual and all his fellow men. Communication and understanding are thus the essence of education, and a democracy offers the best medium where it can flourish. An uneducated person lives in his immediate physical and mental environment. The purpose of education is to liberate him from the bondage of environment without at the same time destroying his connexions with it. Education makes man aware of different types of society and civilization. It enables him to view the present in the light of the past. It also aims to give him some understanding why ideals and traditions differ in differing backgrounds. The function of education is thus to liberalize the sympathies and educate the imagination. To do this is to instil in the mind a sense of the inevitability of change, while recognizing the great truths which have remained constant in the midst of all flux. The recognition of these truths is the essence of spirituality. The role of education is to foster civilization and culture based on a spiritual conception of life by making the individual the inheritor of the wisdom and experience of all ages and all peoples.

February 1954.

POSTSCRIPT

SINCE the first edition of this book was published death has removed from the Indian scene one of the most powerful figures in India's recent history. Maulana Abul Kalam Azad was not only the first Education Minister of free India but also one of the major architects of Indian freedom. He has helped more than any other single individual in shaping the educational policies of independent India. Since 1921 education has been the charge of provincial or State Governments and as such many thought that a Central Ministry of Education had no important role to play. Maulana Azad proved that this need not be so and made the stamp of his personality felt in every sphere of Indian education. This postscript has thus acquired a sad but special significance as it marks the end of one phase in the growth and reconstruction of education in free India.

I

The progress reported in the earlier chapters has been maintained in all fields. At the level of elementary education there has been steady increase in enrolment and about 55 per cent of children in the age group 6-11 are now attending school. In States like Bombay, Kerala, Madras or West Bengal the enrolment is much higher and it is expected that the goal of universal free elementary education will soon be reached in at least some of the States.

Perhaps of even greater importance for the future is the persistent endeavour to improve the quality of such education. It has been increasingly recognized that any system of education must in the ultimate analysis depend for its quality on the quality of the teacher. The last three or four years have been marked by an increasing effort to improve the quality of the teacher by revising his salary, increasing his professional efficiency and raising his social status. The Central Government has come directly into the

picture by offering to supplement the financial resources of the States for giving effect to such improvements. Though much yet remains to be done and the position is not yet satisfactory, it would be fair to say that social inertia in the matter has been disturbed. Once the public conscience is roused, the teacher can expect a better deal from all levels of Government and society.

One other development in the field of elementary education may be specially noticed. In the years immediately following independence, there was a strong reaction against the prevailing system of education. The ideals of Basic education captured the public imagination and many talked of replacing the traditional by the Basic system overnight. Some of the advocates of the Basic system however interpreted it with a rigidity and narrowness which was against the best educational interests of the country. They raised its practices to the status of dogmas. What was even worse was an uncritical and sweeping condemnation of the old system of elementary education. This provoked resentment and opposition from teachers who followed traditional ways. Since such teachers constitute an overwhelming majority at the elementary level this has created unnecessary division and bitterness between the traditionalists and the innovators.

It seems that this unfortunate phase is now coming to an end, if it has not already ended. It is being increasingly recognised that it is not the system but the quality of the teacher that makes education significant. Mr. Jawaharlal Nehru expressed the feelings of the vast majority of men of common sense when he declared that what he wants for India is not any particular label or system, but a good modern education that will develop in the youth of the country self-reliance, moral values and a scientific outlook.

There has in consequence been a rapprochement between the two systems. The advocates of Basic education have increasingly given up some of their dogmatic beliefs while followers of traditional methods have recognized the importance of the principle of activity in Basic education. Crafts are being introduced into traditional schools and Basic teachers are recognizing the value of the use of books in educating the young.

Even more important has been the effect on the relation between the teachers of the two systems. The antipathy of the traditional teacher—sometimes developed in sheer self-defence—has in the past been a main cause for the slow spread of the Basic system. Differential rates of pay for the two types of teachers had further enhanced their antagonism. Such distinctions are now being gradually abolished and pay scales adjusted to the qualifications and experience of the teacher without distinction between the systems.

An important recent measure which is likely to have beneficial results is the establishment of the All-India Council for Elementary Education to plan and organize studies in the administrative, financial and pedagogic problems relating to this field. A National Institute of Basic Education has also been established for research into its problems and the provision of advanced training to inspectors, administrators and other higher personnel. Systematic and scientific study of the system is bound to lead to improved techniques and remove shortcomings in practice as and when they are revealed. It may be hoped that the result of these steps will be the evolution of a pattern in which the contributions of Basic education will be incorporated in the values of the old system.

II

In the field of secondary education also progress can be measured both qualitatively and quantitatively. There has been increase in enrolment and in the number of schools. As against 6 million pupils in 1954, the number today is almost 9 million in all types of secondary schools. In 1948 the number of high and higher secondary schools in India was less than 5 000. By 1956 the number had increased to almost 11,000.

Along with this quantitative expansion, the pursuit of qualitative improvement has continued. In 1955 the Central Advisory Board of Education and a Conference of Vice-Chancellors recommended a pattern of education which would comprise eight years of integrated elementary education and three years of higher secondary education with diversified courses. It was also

recommended that secondary education should be remodelled to serve as a terminal point for the majority and as a preparation for higher studies for a select minority.

These recommendations are being implemented in consultation with State Governments. A pattern of secondary education is being evolved to include a core curriculum of languages, social studies, general science and one compulsory craft. Diversified courses in Humanities, Science, Technology, Commerce, Agriculture, Fine Arts and Home Science will be provided as additional subjects to cater to the needs of pupils with differing aptitudes and tastes. Over 500 multipurpose schools with about 750 diversified courses have already been established. About a hundred of such schools are of the higher secondary type.

The All-India Council for Secondary Education was set up in August 1955 with the object of reviewing the progress of secondary education throughout the country and serving as an expert body to advise the States and the Central Government on the improvement and expansion of secondary education in all its phases. The Council has on its staff a number of educational experts known as Field Advisers. Some of them are officers from the State Departments of Education and are seconded to the Council for a fixed period. It is expected that service under the Council will give State Education officers an opportunity of reviewing the progress of education from an all-India point of view. When they go back to their own States, they will be in a better position to frame and execute the educational policies of their respective States in an all-India context. The Central Government would also benefit by receiving advice from persons who have first-hand knowledge of educational problems and measures in various States.

The new type of Extension Service to promote closer relations between training colleges and a number of selected schools has proved both interesting and effective. Twenty-four training colleges were originally selected for the purpose in 1955 and have provided a programme for in-service training of teachers in week-end, short-term and long-term courses. In addition they

have organized seminars and group discussions, educational weeks and exhibitions, library services and audio-visual aids. The programme has now been extended to cover fifty-two training colleges and the number of schools associated with each increased. While the extension of the programme is an unquestioned gain, some doubts have been expressed about the expansion of the area for each training college.

The reorganization of secondary education demands a basic reconstruction of syllabuses for high and higher secondary schools. The State Governments requested the assistance of the Central Government in preparing an integrated syllabus for the higher secondary school examination. A Central Coordination Committee was set up in August 1955 and has prepared syllabuses for a large number of subjects with the assistance of small sub-committees. These syllabuses are mainly suggestive in character and provide an outline which will have to be filled up by the State Departments in the light of the special needs and circumstances of their areas.

It has been increasingly recognized that the textbooks used in Indian schools suffer from the lack of a common purpose. Educationists who set the goals, authors who write the books and publishers who publish them have different and at times conflicting aims. The lack of textbooks for the higher secondary stage highlighted the problem but it exists and has long existed in almost every stage of education in India. Some States have sought to deal with the problem by preparing and publishing books themselves. The experiment has ardent supporters and strenuous critics. The Central Bureau of Textbook Research was established in 1954 to study various problems of textbook production and advise State Governments as well as private publishers in the light of its research in the subject.

Another important development was the establishment in 1954 of the Central Bureau of Educational and Vocational Guidance. The introduction of diversified courses at the secondary stage is intended to cater for adolescents with differing abilities and aptitudes but the position is bound to remain unsatisfactory unless

some provision is made to guide each into the appropriate course. The Central Bureau was set up to carry out research in educational and vocational guidance, train guidance personnel and plan specific programmes of guidance in the light of the pupils' aptitudes and the country's needs. A number of State Bureaus of Guidance have also been since set up.

Last, but not least, measures have been adopted for improving the salary scale and conditions of service of secondary school teachers in order to attract and retain the right type of recruits. As with elementary education the position is not yet satisfactory but there are reasons to hope that the most glaring disabilities of teachers will be removed before long.

One may add that in this as in other fields the major problem is one of reconciling the competing claims of quantitative expansion and qualitative improvement. The enormous increase in the number of institutions and pupils has brought in many who in former times would never have entered the field of secondary education. This has led to some fall in the quality of the pupils, but what is potentially an even greater danger, the increase in the demand for teachers has led to the recruitment of persons of indifferent quality into the profession. The industrial development of the country and expansion in the welfare activities of the State have also combined to draw some of the ablest young men and women away from the teaching profession. There is a general shortage of good teachers, but for reasons that are easy to understand, the shortage is most acute in the case of teachers of science and technology. It is being increasingly recognized that unless special measures are adopted to ensure the supply of a sufficient number of teachers of the requisite quality in all subjects, progressive deterioration in the quality of teachers will threaten not only the standards of education but in the ultimate analysis the progress, prosperity and welfare of the nation.

III

In the field of university education, perhaps the most important recent development has been the incorporation of the University

Grants Commission as a statutory body. Established in 1953 the powers and functions of the Commission were enlarged in January 1954. On the 5th of November 1956 it became a statutory body under the University Grants Commission Act 1956. The Act has empowered the Commission to take all necessary steps for the promotion and coordination of university education and for the determination and maintenance of standards of teaching, examination and research in universities. In order to perform its functions under the Act the Commission may enquire into the financial needs of the universities and allocate and disburse grants to them.

An account of the way in which the Commission was established is of interest for the light it throws on the anxiety of the Central Government for the maintenance of academic freedom and university autonomy. It had originally been proposed that a Council of Higher Education would be set up to coordinate university education and maintain standards. The universities felt that such a body might interfere with the academic freedom of the universities and proposed instead that a statutory University Grants Commission may be set up with the power to disburse funds and also carry out the functions intended for the Council of Higher Education. Though a draft Bill had already been prepared the Central Government did not hesitate to accept the suggestion made by the universities. An Act setting up a University Grants Commission was accordingly passed in the light of the recommendations of the universities.

In common with universities in other countries Indian universities have in recent years increasingly faced the problem of shortage of teachers. The competing claims of industry, commerce and administration have attracted some of the ablest men and women. In many cases universities have had to content themselves with recruits of less than the highest quality. Even more serious has been the problem of the drift of some of the best teachers to other professions. One of the first measures of the Commission immediately after its constitution was to take steps to revise the scales of pay of university teachers. The Commission's action has not fully satisfied teachers at universities but it has gone a long way in

removing the sense of pressing grievance and also removed some of the glaring inequalities in pay scales in different regions.

The condition of teachers in universities was bad enough but it was even worse for teachers in affiliated colleges. And yet a vast majority of students receiving collegiate education are served by such institutions. The enormous increase in numbers in collegiate institutions has, instead of leading to an improvement, led to a deterioration in the condition of such colleges. Inadequate staff, insufficient or non-existent libraries and laboratories and acute shortage of space have combined to bring down standards of collegiate education in a large number of institutions. The Commission has recently taken up the question of improving the pay scales of teachers in affiliated colleges as a high priority need.

The Commission has recognized that the major problem at the university stage is the consolidation and improvement of existing facilities. From its inception, the Commission has made large grants to universities for improving their libraries and laboratories. Large-scale loans have also been given to universities and affiliated colleges for the construction of hostels and staff quarters.

For the last forty years, educational reformers in India have pressed for the introduction of a three-year first degree course. As early as 1917, the Calcutta University Commission had recommended a three-year course for the Bachelor's degree for pass as well as for Honours. Several Indian universities accepted this recommendation but the majority of universities continued with a two-year degree course after the Intermediate. In the last ten years, the question has been debated afresh. The concensus of opinion is in favour of a three-year course. The Inter-University Board endorsed this recommendation unanimously at its session held at Patna towards the end of January 1955. In spite of such massive support, the actual introduction of this much-needed reform has been delayed for various reasons. In September 1956, a Committee was appointed to work out the estimates of expenditure if all universities changed over to the new pattern. The report of the Committee was received in May 1957 and steps are in hand for gradually implementing its recommendations.

One other development in the field of higher education may be mentioned. With the advent of independence the demand for removing the disparity of educational facilities between urban and rural areas became increasingly insistent. Whatever educational facilities existed in the past were located in big cities and were generally urban in character. In *The Indian Heritage*, I have discussed at some length the social consequences of this imbalance in the constant drift of the abler among the rural population to towns and cities. Depletion of ability in rural areas has led to an increased gap between village and town. Villages have tended to become static and almost moribund while towns have become centres of unrest and social turmoil.

It was felt that an effort must be made to bridge or at least narrow the gap in educational opportunities between the village and the town. In 1954, a committee was set up to survey existing institutions in rural areas and on the basis of their experience evolve a pattern of higher education which would help rural people to improve their standard of living. Ten rural institutions which had already done good work and were staffed by experienced and devoted teachers were selected for development into Rural Higher Institutes. A National Council for Rural Higher Education was also set up early in 1956 to direct and supervise activities in these institutions. Syllabuses were framed by expert committees representing diverse views and interests. These have been further modified and developed in the light of actual experience of their working.

In a country so vast in area and so diverse in language and culture as India the problem of emotional integration of its people has always posed special difficulties. The ancient institution of pilgrimages was perhaps intended as much for promoting a sense of unity as developing a religious spirit among the people. The need for a stronger emotional integration of the people has become even greater in recent times. Communications have brought the different parts of the country closer to one another but emphasis on local autonomy has simultaneously led to the increasing importance of local languages, local customs and local institutions.

Unity in diversity has been a characteristic feature of Indian civilization throughout the ages, but the synthesis it represents can be maintained only if equal emphasis is laid upon the unity and the diversity of our peoples.

It was mainly with a view to enable young men and women from different parts of the country to come into closer contact with one another and learn something about the immense variety of India's cultural heritage that Inter-University Youth Festivals have been regularly held since 1954. Representatives of each University are selected on the result of Inter-Collegiate Youth Festivals. Winning teams of each university participate in the All-India Festival. The Festival provides for healthy competition in arts and crafts, drama, dance and music. It has given selected university students from all over the country an opportunity of living together and establishing friendships and contacts. Simultaneously, it has also given a great impetus to the development of the artistic and cultural urges of the educated youth.

It is also being increasingly recognized that universities can help to bring the different regions of India closer to one another by providing facilities for the study of local languages and traditions on a much larger scale than has been the case till now. Many Indian universities have departments of Sanskrit, Arabic and/or Persian. Very few provide opportunities for the study of modern Indian languages other than the language or languages of the State in which the university is located. Even when a university offers some facilities for such study, they are usually inadequate. In fact, there is hardly any arrangement for the study of Indian languages and literatures on a comparative basis. A few years ago, the Ministry of Education instituted scholarships to encourage pupils from one language area to study modern Indian languages of other areas. Expansion of facilities on these lines and further development of linguistic and literary studies in universities are desirable not only on academic considerations but also from the point of view of closer emotional and intellectual cooperation among the different sections of the Indian people.

IV

With the passing years the need for expanding the programme of social education has been increasingly felt. The General Election of 1952 was in a sense a gamble in the good sense and judgment of the Indian people. They came triumphantly out of it and proved that even though the vast majority were illiterate, they were educated in the larger sense of the term. The Election of 1957 confirmed this impression, for once again the electorate showed great discrimination in the choice of candidates. The Congress Party which has been in charge of the administration of India since Independence was again returned in power, but the electorate expressed in no uncertain terms its disapproval of certain personalities and groups within the Congress organization.

The result of these two General Elections has further underlined the need for the spread of a sound general education among the people. While by and large the response of the electorate has been discriminating and indeed wise, there have been occasions where narrower considerations like caste, community or immediate self-interest have led them astray. It has also become increasingly clear that national reconstruction demands the removal of disparities among communities, languages and regions. Of these disparities, one of the most marked in contemporary India is the growing gap between rural and urban people.

For almost a hundred years now, Indian political leaders have complained against the drift of the villager to the town. These exhortations have however proved of little avail in the face of the glaring disabilities from which the villagers have suffered. Indian agriculture made hardly any progress in the last three thousand years. An increasing population without improvement in the methods of agriculture has meant an impoverished countryside. The gradual decay of small rural industries in the face of competition from modern factories has further aggravated the problem. The result is that the villages have become poorer in every way. Communications are in many cases non-existent. Educational facilities are inadequate. Health and medical services are

almost unknown. Housing, drainage and sanitation are primitive in comparison to towns, even though Indian urban standards are low in comparison to those in modern Western countries.

After Independence it was felt that a special effort must be made to improve the conditions in the villages. An account has already been given of the way in which the concept of social education received a concrete form in the *Community Development Projects* and the *National Extension Services*. Since then further attention has been focussed on the problem and a Ministry of Community Development set up to plan, organize and co-ordinate efforts for the complete regeneration of the villages. The Ministry aims at the development of agriculture and introduction or improvement of various forms of small and middle sized industries. It seeks to teach the villagers co-operative methods with a view to improve their conditions of life. It has applied itself to the task of bringing education in its various forms to children and adults in rural areas. Roads have been built, houses have been improved and small-scale irrigation projects undertaken through the voluntary effort of villagers themselves.

It is obvious that the programme this new Ministry has set before itself requires an immense army of trained personnel at various levels. The training of this personnel is in itself a stupendous task, and perhaps one of the major successes of the programme has been the planning and establishment of training institutions with syllabuses suited to meet rural needs. In most cases, the work has been of a pioneering nature with no precedent anywhere else to guide the first tentative steps. The experience gained till now indicates the need of two types of service. There must first be the village level worker who is an all-purpose man with some knowledge of all types of rural problems, and more important still, with contacts which enable him to secure expert advice on any special topic. In addition, there must be more specialized personnel like agricultural officers, health officers, midwives, rural engineers, social education workers and teachers for arts and crafts.

The Ministry has also undertaken recently a programme for the

encouragement of rural art in all its forms. Once the basic requirements of survival have been met men express themselves in activities that are peculiarly human. Hunger and sex are common to men and animals and intelligence is used by both in their struggle for existence. When the demands of survival have been met men use their surplus energy in the pursuit of truth, beauty and goodness. One may perhaps stretch the meaning of these terms and say that the values of truth and goodness in a rudimentary sense are found even among animals. They must be aware of and also co-operate with one another in order to survive. Beauty is however a value which is perhaps never found at the animal level of existence. Art is what distinguishes man from all other animals and has led some to describe him as an artistic rather than a rational animal. It is therefore appropriate that a programme of community development should include the encouragement of art in all its forms.

In a country like India this emphasis on art has a special significance. Most of our economic activities have been given an artistic expression. We have festivals for the cultivation of crops and festivals for the harvest. Even the seasons have their own special artistic forms. There has been a conscious effort to bring grace and sweetness to everyday life in a thousand ways. Even casual visitors are struck by the beauty of form exhibited in articles of common use. Religious and philosophical truths have been preserved and inculcated mainly through the medium of art. Art is simultaneously universal and unique and the long tradition of art in India has helped the common villager to realize something of this balance in his own life.

Art can however never be preserved. It can only be recreated. Continuity in art becomes a dead formalism if it is mere repetition. On the other hand without continuity art may degenerate into mere artifice. This is the dilemma which rural Indian art has faced for the last hundred years or more. The challenge of the modern world has shaken old faith. The forms of production have changed. Society has lost its ancient moorings. Traditional forms of art have lost their inner impulse and degenerated into lifeless

ritual. By seeking to revive the villages and bring them into line with the modern world, the programme of community development is creating conditions where art may again become vital and organic. The regeneration of rural India demands that the villagers should combine continuity with creativity, experiment with tradition, modern urge for improvement with the ancient values of calm and contentment.

The programmes described above have been concentrated in rural areas, but it is now being increasingly felt that there is equal need of a comprehensive social education programme for urban areas. The villages may be moribund, but the process of decay has been slow and almost imperceptible. In the towns, the need for remedy is desperate. The urban population generally consists of people who have been uprooted from their moorings but have as yet struck no new roots. Usually it is the more energetic and ambitious among the villagers who leave their familiar surroundings in search of better opportunities. Lost in the anonymous humanity of the towns, they no longer feel the sanction of old customs and traditions. Even moral codes may lose their former hold in the new and unfamiliar surroundings. In many cases unemployment and starvation threaten their very survival. The situation is thus explosive and demands immediate and urgent attention. As for the villager, we must provide also for the townsman a principle of life that will combine experiment with tradition and enable him to seek for material improvement while retaining the moral and spiritual values of his ancient past.

V

The first edition of this book did not include a separate study in the field of technical education in India. As there have been many demands that this gap should be removed, the progress and problems of technical education in contemporary India are treated in somewhat greater detail in this postscript.

The first technical institution in India was established over a century ago but technical and technological education remained

almost static till the outbreak of the Second World War. The need for technicians during the war led to increasing attention to problems of technical education and training but the developments which then took place were intended to serve mainly the needs of the war-time emergency. As such they were not always related to the basic economic and industrial needs of our national life. Nor were adequate steps taken to consolidate the expansion of facilities and make them part of the permanent educational structure of the country.

War-time experience was however valuable as it revealed the almost total dependence of India on imports from abroad for even the essential requirements of the national economy. Ambitious post-war plans were made to fill up these gaps and led to an increasing provision for the training of scientific and technical personnel. There was a growing recognition of the need of expanded facilities for technical education but even at that stage the programme was not based on any survey or assessment of the requirements for technical manpower. The first step in this direction was taken towards the end of 1945 when an All-India Council for Technical Education was established to advise on all aspects of organization and development of technical education.

An even more important step was taken soon after the country became independent. A Scientific Man-Power Committee the first of its kind to be appointed in any Asian country reviewed the position of technical manpower and assessed needs in the light of national programmes. The growing consciousness of the importance of technical education received further impetus under the impact of the Five-Year plans. It is now increasingly recognized that an adequate supply of technical manpower is essential for the balanced development of India in industry, transport, communications, agriculture and industrial research. The last ten years have in consequence seen significant advances in all fields of scientific and technical education in the country.

From the purely quantitative point of view the expansion in facilities of technical education has been phenomenal. In 1947 there were 32 institutions which offered the first degree in

Engineering or Technology. By 1957 the number of such institutions had increased to 75. The number of admissions to such institutes in 1947 was less than 3,000. In 1957 the number was almost 10,000. It is estimated that at the present rate of development, the annual admissions to the degree course will exceed 11,000 by 1961. Even this is not considered adequate and provision is now being made for increasing this number to 13,000.

The expansion of facilities at the diploma level has been even greater. From 50 institutions which admitted less than 4,000 students in 1947, the number increased to 127 institutions admitting 16,000 students in 1957. This figure is sought to be raised to an annual intake of 25,000 by 1961.

Equally remarkable has been the increase in output. The number of engineering and technical graduates has increased from about 1,300 a year in 1947 to over 4,000 in 1956. Less than 1,500 students received the diploma in 1947 while in 1957 the number reached almost 5,000. It is estimated that the output by 1961 will be 8,500 graduates and 15,000 diploma holders a year.

The progress achieved has not been merely quantitative. The All-India Council for Technical Education and its Regional Committees have carried out a study of each technical institution in the country, assessed its shortages in instructional facilities and drawn up detailed schemes for removing them. These studies showed that almost in every case there is need for additional staff, equipment and accommodation. The Central Government as well as the State Governments have provided the necessary financial assistance and it may be said that almost all the institutions have been strengthened and improved.

New technical institutions are also being established as a result of such surveys. Consultations are first held with State Governments, industry and universities to ensure that there is neither unnecessary duplication nor lack of courses needed in the national interest. Detailed plans are drawn up by expert committees to ensure that standards of instruction are maintained and improved. Close contacts with industry are established to ensure that students in such institutions get suitable facilities of practical training and

wherever necessary apprenticeship in trade or industry. It is an important aspect of national policy to ensure that no State should remain without its own facilities for the first degree and diploma courses in the basic branches of engineering. As a result of these measures facilities have been considerably expanded and regional inequalities greatly reduced if not fully removed.

Another aspect of qualitative improvement is the creation of facilities for post graduate study and research in different branches of engineering and technology. Before 1947 these facilities were almost non-existent in India. Today a large number of institutions offer such courses in a wide range of subjects. Provision exists at present for nearly 500 post-graduate students and research scholars in institutions in different parts of the country. By 1961 it is proposed to expand the facilities to provide for at least 1500 advanced students and scholars.

Improvement of facilities in existing institutions is one indication of the national concern for advanced studies and research in engineering and technology. The establishment of new institutions is another and perhaps even more striking evidence of the same endeavour. These institutes are of two types. A chain of National Laboratories has been set up in different parts of the country to deal with different fields of science and technology. Side by side Higher Technological Institutes have been or are being established to train the expert technical personnel needed by modern industry. The Council of Scientific and Industrial Research has already set up 18 laboratories and institutes which deal with problems of general research, test and standardize new products, provide expert advice for further industrial development and generally offer facilities to scientists, universities and industry. They are also intended to play an important part in the spread of scientific knowledge in all walks of national life.

Equally spectacular has been the establishment of the Indian Institute of Technology at Kharagpur as the first of the chain of four national Higher Technological Institutes. It provides facilities for education and training to over 1600 students in the undergraduate and over 400 students in the post-graduate courses and

research work. Modelled on the Massachusetts Institute of Technology in the United States and the Swiss Federal Technological Institute at Zurich, the Kharagpur Institute is intended to serve the nation by training the highest grades of technologists and engineers and disseminating and advancing scientific and technical knowledge. It has recognized that its alumni must be conversant not only with latest developments in the theory and practice of their respective subjects but also have a broad-based education which will enable them to act as leaders in various fields of national life. It has therefore faculties not only in fundamental sciences and the various technologies but also in the liberal arts. The Act of Parliament by which it has been incorporated as an institution of national importance is the first legislation of its kind since independence.

Three more Institutes on the same comprehensive scale are in the course of establishment at Bombay, Madras and Kanpur. It is of particular interest to note that the institute at Bombay is being established with technical assistance offered mainly by the Soviet Union through Unesco. The institute at Madras is to be developed with the aid of technical assistance offered by the West German Government and it is expected that the U.S.A. will offer substantial help in the development of the Institute at Kanpur. Each of these institutes will provide facilities for the training of about 1,500 students in undergraduate, and 400 students in post-graduate courses. It is expected that the Institute at Bombay will admit the first batch of students in the undergraduate courses in July this year. The Institutes at Madras and Kanpur are expected to follow before the end of 1961. It will be seen that when these four Institutes start to function at full strength, India will rank among the leading countries of the world in opportunities of higher engineering and technological education.

The story of technological education in India would not be complete without some reference to the Indian Institute of Science, Bangalore. Founded in 1911 as a memorial to the vision and magnanimity of Jamshedji Tata, it had built up a high reputation in the field of scientific research even before India became

free In 1946, the Central Government decided that the Institute should also offer facilities for advanced studies and research in technology and thus promote greater co-operation and interaction between the pure and the applied sciences In the last ten years the Institute has developed facilities for training and research in various faculties of engineering and technology Over 400 post-graduate students and research workers in science and technology are at present working in the different Departments of the Institute

The industrial development of the country needs not only high-grade scientists and technologists but also a large number of technicians and skilled workers Many of them will take to a profession either during or immediately after secondary education In fact for the majority, secondary education is likely to be the terminal stage either because of their aptitude and interest or because of their economic need The provision of diversified courses at the secondary stage and the establishment of technical schools of various types are thus an important aspect of educational reconstruction that is now in progress in India

The problem of integration of general education and technical training is not peculiar to India The increasing tempo of economic development makes it necessary that the youth coming out of school should attain fair proficiency in a trade and also achieve a fair standard of general education within a stipulated period Without general education, an individual cannot function as an effective citizen in a democratic State Without technical training he is unable to maintain himself in this competitive world The multipurpose schools will cater mainly for those who seek higher education, but some of their pupils may also take to a profession at the end of their school career Another solution that is being offered in India is the establishment of junior technical schools which will offer a three-year course for the age-group 14-17 The curriculum will include languages and humanities, mathematics and science, engineering drawing, workshop training and elementary electrical and mechanical engineering Workshop training will occupy about 60 per cent of the total time In the first two years of the course, the training will be general and cover

carpentry, pattern making, foundry, smithy, machining and fitting. Its aim will be to give the pupils practical knowledge about properties of materials, use of tools, operations and processes and precision working. In the final year, the course will provide for intensive and specialized training in one of the engineering trades according to the candidate's choice.

The training in these schools is intended to give pupils the required degree of skill and competence for ready employment in industry. To ensure this, the last year of the course will be conducted partly in industry and partly in the school on the sandwich system. The pupil will alternate between industry and school for four days and two days respectively in each week. The training in industry will be on an apprenticeship basis while the school will provide necessary institutional studies in academic and technical subjects.

The basis of India's economy is gradually shifting from agriculture to industry. Vigorous efforts are being made to establish key and heavy industries of all types. Simultaneously, attempts are being made to improve Indian agriculture and meet the demand for consumer goods by encouraging and developing small-scale and cottage industries. For the success of these efforts, India must develop her own resources and technical ability and produce her own industrial plants, equipment and machinery. The vast natural resources of the country, particularly water power and mineral resources, have to be fully utilized. Scientific and industrial research has to be organized for the country's advance. High-grade scientific and technological personnel is needed especially for design, development and research work. Universities and other institutions of higher learning must in this new context train scientists and technologists who are abreast of the latest trends in research and able to apply their results to concrete tasks in engineering and industry.

The competing claims of industry and administration are drawing away a large number of the ablest students from post-graduate courses in almost all fields of study. This is specially true in the case of students of engineering and technology. Immediate employment is available to able students and offers ready and

attractive openings. Scholarships, fellowships and other incentives for further study or research cannot always compete with the lure of immediate employment and assured future. India is no exception in this regard, for practically every advanced country is facing the same situation. In fact, it is sometimes argued that such a competition between higher studies and immediate employment is a sign of a country's technological advance.

A more basic problem which faces engineering and technological education in India and elsewhere is the question of a proper balance between scientific and technical subjects and the other disciplines that constitute a complete education. The scientist, the technologist or the engineer is a responsible professional man whose professional acts have human and social consequences. Even when he is not aware of it, he is instrumental in creating a new society and a new economic order as well as a new physical environment. One result of his professional accomplishments is that he is called upon to accept an increasingly responsible role as a leader of the community.

To discharge his growing responsibilities, the engineer needs professional competence, as well as an understanding of himself and of the world in which he lives. The purpose of modern scientific and technological education is to provide him with a foundation upon which he may build a career of genuine service to man. Scientific and technical education must therefore be supplemented by knowledge of the humanities and the social sciences. These different disciplines do not stand apart but together constitute an integral system of education for man. Scientific and technical training support and are in turn supported by knowledge of the liberal arts. The humanities and the social sciences represent for the technologist and the engineer, as indeed for all men, the heart of an inherited human experience.

The problem which faces universities and other institutions of higher learning is to design courses that will produce first-grade scientists and technologists who are also conversant with human history and civilization. The normal time taken by a student to qualify for the first degree is about four years. To achieve these

objectives within this short period requires the most careful planning. The content and standard of the courses must be such that they satisfy both technical and human needs. This can be done only if necessary facilities are available, and more important still, the right atmosphere of learning and service created and maintained. In the final analysis the success of such endeavours depends on the quality of the teachers. Even a university which has fully developed faculties of liberal arts, sciences and technology cannot live up to these ideals unless the teachers co-operate with one another in a right atmosphere of learning. New challenges arise as the frontiers of scientific knowledge recede. Only men of the highest quality can train the younger generation to meet these challenges.

Advances in science and technology increasingly demand more intensive specialization. Specialization may however reduce the expert to an intellectual moron if it leads him to discard or ignore the humanities and the arts which add grace to life. The problem has gained in importance with the increasing dependence of society on science and technology. There is thus an insistent demand that the courses at universities should be so designed as to train the future technologists also to be leaders of men. As perhaps never before in history, modern man needs depth, flexibility and a capacity for growth in directions which we can today only dimly visualize. The greater the urgency of this task, the greater the challenge which faces universities and other institutions of higher learning in achieving a proper balance between the demands of the sciences and the humanities. The efforts of the Kharagpur and the Bangalore Institutes for achieving such balance have already been mentioned. A recent Government Resolution on Scientific Policy is perhaps the first of its kind and recognizes in clear terms the role of the scientist in the modern world. The creation of a new Ministry of Scientific Research and Cultural Affairs may be regarded as an even more spectacular effort for the achievement of the right synthesis between science, technology and culture.

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